



The Chemical Company

November 14, 2011

Mr. Frank Battaglia (2 copies)  
USEPA Region I  
5 Post Office Square Suite 100  
Mail Code OSRR07-3  
Boston, MA 02109-3912

**Re: Annual Monitoring Reports for 2010**  
**BASF Corporation**  
**180 Mill Street, Cranston, RI 02905**  
**EPA ID RID001194323**

Dear Mr. Battaglia:

BASF Corporation is submitting the annual Site-Wide Monitoring Program (SWMP) report for the BASF Corporation facility located at 180 Mill Street, Cranston, RI. The report covers the monitoring activities and the results of these activities that were performed at the facility during the sampling events throughout 2010.

The quarterly sampling continued through the end of 2010. All four quarterly sampling events met the MPS for all the Chemicals of Concern.

If you have questions or need additional information, please contact me at (732) 914-2517 or by email at [dorren.mcnichols@basf.com](mailto:dorren.mcnichols@basf.com).

Sincerely,

A handwritten signature in black ink that appears to read "Dorren K. McNichols".

Dorren K. McNichols  
Compliance Manager

c: Ms. Margaret Dein Bradley, RIDEM



The Chemical Company

## **ANNUAL MONITORING REPORT**

**CIBA-GEIGY FACILITY  
180 MILL STREET  
CRANSTON, RHODE ISLAND**

**MONITORING RESULTS**

**FOR**

**2010**

**BASF CORPORATION (formerly Ciba Corporation)  
TOMS RIVER, NEW JERSEY 08755**

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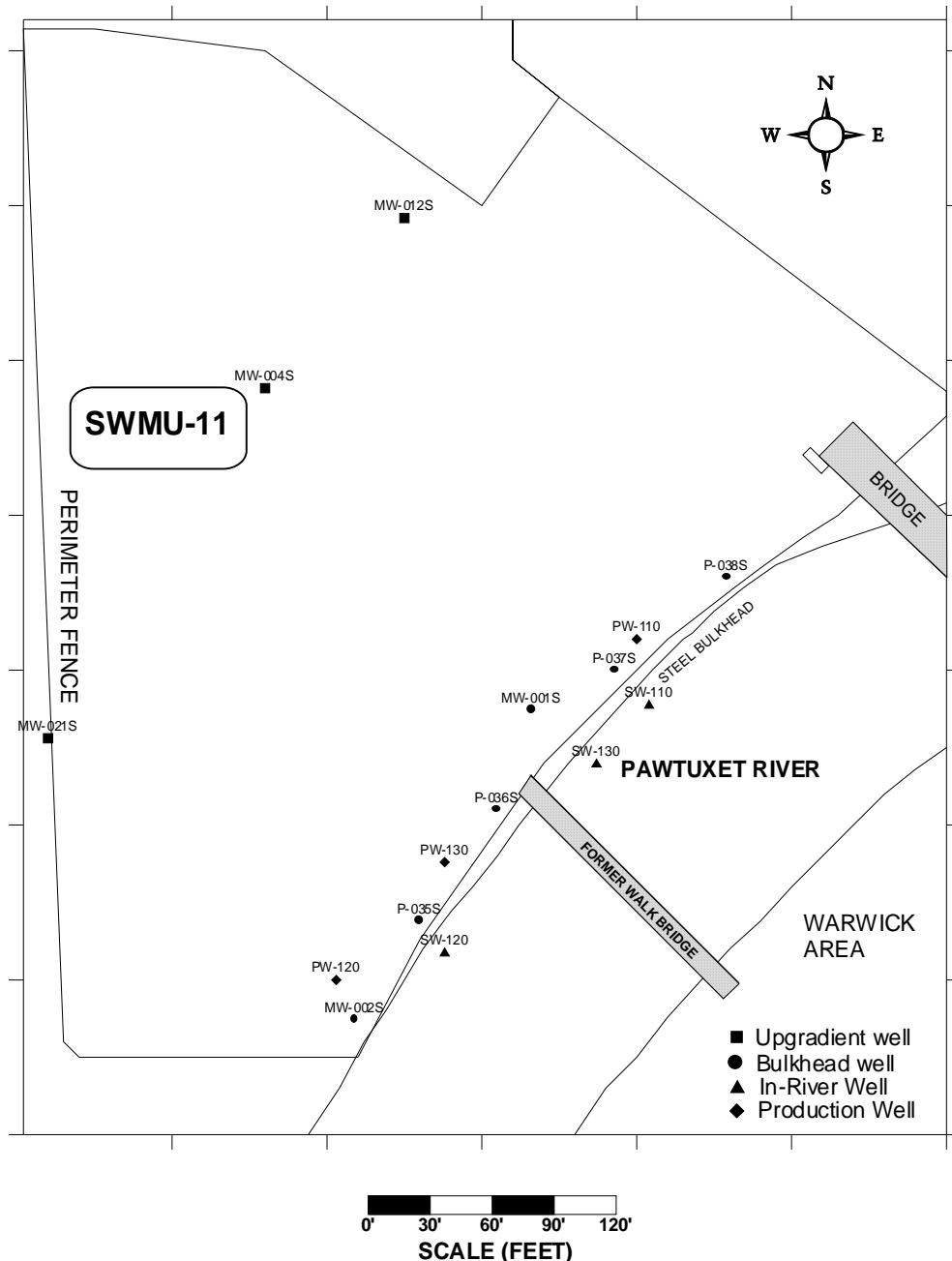
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## WELL LOCATION MAP

### BASF Corporation (formerly Ciba Corporation)

CRANSTON, RI FACILITY  
FORMER PRODUCTION AREA

#### Chemical Well Monitoring Network



## 1.0 SUMMARY

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On June 16, 1989, Ciba-Geigy Corporation (now BASF Corporation) entered into an Administrative Order on Consent (AOC) with the USEPA. The AOC required BASF Corporation (formerly Ciba) to conduct a Corrective Measures Study (CMS) and propose Media Protection Standards (MPSs) for the former manufacturing facility at Cranston, RI (the Facility). MPSs for five chemicals of concern (COC) were developed (see Table 1) and are monitored in all wells as part of the Site-Wide Monitoring Program (SWMP).

On May 5, 2006, Ciba met with the USEPA and RIDEM to outline a proposed limited shutdown of the Groundwater Extraction and Treatment System (GETS) at the Ciba facility in Cranston, RI. The GETS system operated for more than 10-years to restore groundwater to Media Protection Standards (MPSs) as published in the Corrective Measures Study (CMS) report dated August 1996. In 2004, groundwater monitoring results at the site showed monitoring wells meeting the MPSs, however, confirmation was not achieved in 2005 when well MW-002S exceeded the MPS for chlorobenzene. Ciba believed that volatility in the chlorobenzene analysis of MW-002S was a factor in the exceedance, and therefore, a trial shutdown would yield valuable information on groundwater quality at static conditions.

On May 24, 2006, Ciba shut down the GETS with EPA approval and initiated a 14-month monitoring event to evaluate groundwater quality. The following 9-wells were monitored for quality which included the MPS compounds identified in the CMS:

**Monitoring wells:** MW-001S, MW-002S, MW-004S, MW-012S, MW-021S, P-035S, P-036S, P-037S, and P-038S

The sampling frequency for these wells was changed from annually to quarterly and the sampling results for these wells are presented graphically in Appendices B, C and D. Included in the Appendices are the historical data for these wells, and the historical data for other wells for which a significant monitoring time interval exists.

Based on the data collected during the trial shutdown, Ciba reactivated the pumping of PW-120 and PW-130 on August 6, 2007. However, on March 30, 2010, due to major rainfall over a three day period the Pawtuxet River flooded the Cranston site and the groundwater extraction system became dysfunctional as a result of this significant flooding event. Data collected in 2008 characterized a limited area in the southern portion of the former Production Area near Well PW-120 with elevated concentrations of VOCs in both soil and groundwater. Save for this area, it is apparent that the groundwater restoration standards have been met. In lieu of renovating the pumping wells, EPA approved a work plan to characterize the recalcitrant zone and a conduct pilot test to determine whether this impact could be remedied using an air sparging and soil vapor extraction technology. A work plan was submitted and approved by EPA in the Spring of 2011. The work was conducted in

the Summer of 2011 and the findings are being prepared as of this writing. The quarterly sampling did continue through the end of 2010 and all the wells met the five MPSs for all the Chemicals of Concern.

The next quarterly monitoring will continue through 2011.

## **2.0 OBJECTIVE**

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The objectives of the Site-Wide Monitoring Program are to evaluate groundwater quality and verify the Groundwater Extraction and Treatment System (GETS) is controlling releases to the Pawtuxet River while long-term corrective measures to areas of concern are being addressed, specifically SWMU-11. However, due to the shutdown of the system, this report will verify that groundwater standards have been met.

## **3.0 INTRODUCTION**

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In August 1996, Ciba (now BASF) submitted to the USEPA a Pawtuxet River Corrective Measures Study (PRCMS) Report. In the PRCMS report (Section 3.5.1, page 3-12), Ciba proposed to measure groundwater elevations in the former Production area following startup of the groundwater capture system until the groundwater capture and pretreatment system were shutdown.

Therefore, groundwater elevation data is collected from 23 wells to show if shallow contaminated groundwater in the former Production area is hydraulically controlled from discharging into the Pawtuxet River.

Inclusive of the PRCMS, Ciba also proposed to monitor groundwater quality at the Facility. Groundwater was sampled semiannually from 12 selected overburden-monitor wells to evaluate changes in groundwater quality, specifically for the 5 chemicals of concern. As of 2004, Ciba initiated annual monitoring as agreed to by the USEPA.<sup>1</sup> However, BASF went back to quarterly sampling after the trail shutdown in 2006.

## **4.0 MEDIA PROTECTION STANDARDS**

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During the RCRA Facility investigation, a MPS<sup>2</sup> was developed for each of five chemical contaminants detected in the former Production Area groundwater. These contaminants and their respective MPSs are summarized in Table 1 and discussed in detail in the PRCMS Report, Section 2.4.1.

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<sup>1</sup> Email exchanges between B. Cohen, Ciba, and F. Battaglia, USEPA, dated March 9, 2004.

<sup>2</sup> From the Public Health and Environmental Risk Evaluation (PHERE) that concluded the sole receptor impacted by contaminated groundwater were benthic invertebrates in the shallow sediments of the Pawtuxet River.

**Table 1**  
**Media Protection Standards**  
**Chemical Of Concern**  
**CIBA-GEIGY, Cranston R.I. Facility**  
**Former Production Area**

Compound	MPS Concentration (ppb)
1,2-dichlorobenzene	94
chlorobenzene	1700
2-chlorotoluene	1500
toluene	1700*
xylenes	76

\* Rhode Island Groundwater Objective GB - Groundwater classified as GB has been designated by the Rhode Island Department of Environmental Management (RIDEM) as not suitable for public or private drinking water use.

## 5.0 ANNUAL MONITORING RESULTS

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This report summarizes the groundwater quality results for the COC sampling that was performed throughout 2010. The COC data are compared to previous sampling rounds dating back to March 1996, when monitoring activities were initiated. Also included in this report are the results of the hydraulic monitoring performed on October 11, 2010. The current hydraulic results are compared to pre-pumping baseline conditions dated September 30, 1993 (see Appendix A).

### **5.1 Hydraulic Monitoring**

Piezometric contours for the overburden aquifer were created using data collected from 23 groundwater monitor wells and 3 extraction wells.

The tabulated groundwater elevation data and the associated potentiometric contours, Figures 2 and 3, are included in Appendix A.

The baseline results in Figure 2 show groundwater flow from northwest to southeast to the Pawtuxet River. Figure 3 shows the current groundwater flow.

The hydraulic capture along the bulkhead is discussed in detail in the report "Capture Zone Analysis, Former Production area, Cranston, Rhode Island" dated July 7, 2000.

## **5.2 Monitoring for Chemicals of Concern (COC)**

Ten wells were sampled as part of the SWMP. The wells are divided into three main groups; shown on the Location Map in Section iii of this report. The COC analytical results are tabulated and included in Table 2 at the end of this section.

Three wells, MW-004S, 012S, and 021S are designated upgradient to the Bulkhead wells. Well MW-004S showed low level contamination for four of the five COCs during the first quarter sampling event, and dropped off to very low concentrations or non-detects for the remaining three quarters. The result for MW-021S is anomalous in that only 2-chlorotoluene is detected there.

Results for the 6 Bulkhead wells show the presence of varying levels of chlorobenzene except for P-038S, a well furthest from the contamination, and north of the former walk bridge. Also present is 1,2-dichlorobenzene at the southern bulkhead wells MW-002S and P-035S and 2-chlorotoluene in 3 of the 6 wells.

While the relatively heavy compounds (chlorobenzene, 1,2-dichlorobenzene and 2-chlorotoluene) have been dramatically reduced from historical highs, they remain relatively recalcitrant along the bulkhead between wells MW-002S, MW-001S and P-035S.

Along the bulkhead, the composition of contamination upstream and downstream of PW-130 is different, implying different sources. For example, chlorobenzene and 1,2-dichlorobenzene dominate over 2-chlorotoluene upstream of PW-130, while downstream, chlorobenzene and 2-chlorotoluene dominate over 1,2-dichlorobenzene.

The In-river wells are located beyond the bulkhead in the Pawtuxet River. None of the In-river wells were sampled. Both SW-110 and SW-130 were approved by the EPA to discontinue monitoring. Well SW-120 was unable to be sampled due to a blockage.

**Table 2**

**Monitoring Results for 2010**  
**Chemicals Of Concern**  
**(as ppb)**

Well Number	Sample Date	MPS	94 1,2-Dichloro- benzene	1700 Chloro- benzene	1500 2-Chloro- toluene	1700 Toluene	76 Xylenes
<b>Upgradient</b>							
MW-004S	22-Mar-10		9	44	26	1 U	1
	3-Jun-10		1 U	1 U	11	1 U	1 U
	10-Sep-10		1 U	4	27	1 U	1 U
	7-Dec-10		1	7	6	1 U	1 U
MW-012S	22-Mar-10		1 U	1 U	1 U	1 U	1 U
	4-Jun-10		1 U	1 U	1 U	1 U	1 U
	16-Sep-10		1 U	2	1 U	1 U	1 U
	7-Dec-10		1 U	1 U	1 U	1 U	1 U
MW-021S	22-Mar-10		1 U	1 U	7	1 U	1 U
	4-Jun-10		1 U	1 U	200	1	1 U
	16-Sep-10		1 U	2	540	2	3
	7-Dec-10		1 U	1 U	13	1 U	1 U
<b>Bulkhead</b>							
MW-001S	12-Mar-10		1 U	890	1 U	2	1 U
	3-Jun-10		1 U	1500	1	1	27
	9-Sep-10		1 U	1200	1 U	2	39
	6-Dec-10		10 U	1600	10 U	10 U	57
MW-002S	22-Mar-10		6	1400	2	45	4
	3-Jun-10		13	500	44	35	8
	10-Sep-10		12	1500	28	59	10 U
	6-Dec-10		15	1400	63	48	1 U
P-035S	12-Mar-10		5	220	97	1 U	1 U
	2-Jun-10		8	1300	49	1 U	4
	10-Sep-10		11	830	48	10 U	10 U
	6-Dec-10		11	1600	61	10 U	1 U

U = Non-detect with detection limit given

J = Estimated value

MPS Exceedance

**Table 2 - continued**

**Monitoring Results for 2010**  
**Chemicals Of Concern**  
**(as ppb)**

Well Number	Sample Date	MPS	94 1,2-Dichloro- benzene	1700 Chloro- benzene	1500 2-Chloro- toluene	1700 Toluene	76 Xylenes
P-036S	12-Mar-10		2	350	33	1 U	1 U
	2-Jun-10		1	240	11	1 U	1 U
	10-Sep-10		10 U	320	14	10 U	10 U
	6-Dec-10		10 U	200	10 U	10 U	1 U
P-037S	12-Mar-10		1 U	3	9	1 U	1 U
	2-Jun-10		1 U	4	16	1 U	1 U
	9-Sep-10		1 U	2	16	1 U	1 U
	6-Dec-10		1	3	19	1 U	1 U
P-038S	12-Mar-10		1 U	1 U	1 U	1 U	1 U
	2-Jun-10		1 U	1 U	5	1 U	1 U
	9-Sep-10		1 U	1 U	1 U	1 U	1 U
	6-Dec-10		1 U	1 U	1 U	1 U	1 U
<b>In-River</b>							
SW-110	9-Sep-10		NA	NA	NA	NA	NA
SW-120	9-Sep-10		NA	NA	NA	NA	NA
SW-130	9-Sep-10		NA	NA	NA	NA	NA
<b>Extraction</b>							
PW-130	22-Mar-10		1300	2400	66	27	7

U = Non-detect with detection limit given

J = Estimated value

NA = Not Available, sample not taken. Well Blockage

MPS Exceedance

## 6.0 DISCUSSION

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The 2010 Certificates of Analysis by R.I. Analytical are included in Appendix E. The cumulative results from 1996 to the present for 11 wells and 5 COCs are included as Tables 3, 4, and 5 in Appendices B, C, and D respectively. The cumulative results of each COC are plotted as Time-Series graphs for a better perception of trends. These graphs are also found in the respective Appendices B, C, and D.

From the samples collected during the year, the data shows that the relatively light compounds (toluene and xylenes) have been effectively remediated. While the relatively heavy compounds (chlorobenzene, 1,2-dichlorobenzene and 2-chlorotoluene) have been dramatically reduced from historical highs, they remain relatively recalcitrant along the bulkhead between wells MW-001S and MW-002S. The result at MW-021S is anomalous in that only 2-chlorotoluene is detected there.

## 7.0 CONCLUSION

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The quarterly sampling continued through the end of 2010. All monitoring locations met the MPS for all the COCs tested.

The monitoring wells will continue to be sampled quarterly throughout 2011.

**APPENDIX A**  
**TABULATED**  
**GROUNDWATER ELEVATION DATA**  
**AND**  
**POTENTIOMETRIC CONTOURS**

**BASF CORPORATION**  
**(FORMERLY CIBA-GEIGY CORPORATION)**  
**180 MILL STREET**  
**CRANSTON, RI**

**GROUNDWATER MONITORING**

Monitoring Well	TOC MSL Feet	TOC to Water Feet	GW ELEVATION MSL Feet	GW ELEVATION MSL Feet
PW-110	15.72	17.47	-2.28	NA
PW-120	14.25	13.70	6.63	NA
PW-130	16.59	20.10	7.87	NA
MW-001S	15.04	8.38	7.86	9.39
MW-002S	14.46	8.68	8.11	9.21
MW-003S	16.61	8.35	9.25	7.96
MW-004S	21.29	12.04	10.57	10.72
MW-010S	22.62	12.30	11.20	11.34
MW-012S	22.54	12.50	10.86	10.54
MW-013S	18.44	10.10	9.69	9.83
MW-020S	21.94	11.44	14.84	11.53
MW-022S	16.87	8.25	9.47	9.63
MW-023S	20.71	dry	9.46	9.41
MW-024S	21.04	dry	11.14	10.89
MW-034S	18.85	9.20	10.11	10.4
P-001S	16.41	10.00	7.68	9.17
P-002S	13.85	7.90	7.74	8.38
P-003S	15.45	8.27	7.45	7.09
P-004S	19.92	10.10	10.32	11.07
P-005S	21.18	11.90	10.63	10.68
P-006S	23.62	13.85	10.72	10.39
P-034S	17.15	8.25	9.43	10.12
P-035S	15.32	9.70	7.99	8.51
P-036S	15.91	10.00	8.06	8.62
P-037S	15.69	10.05	7.95	8.96
P-038S	16.19	8.52	9.19	8.74

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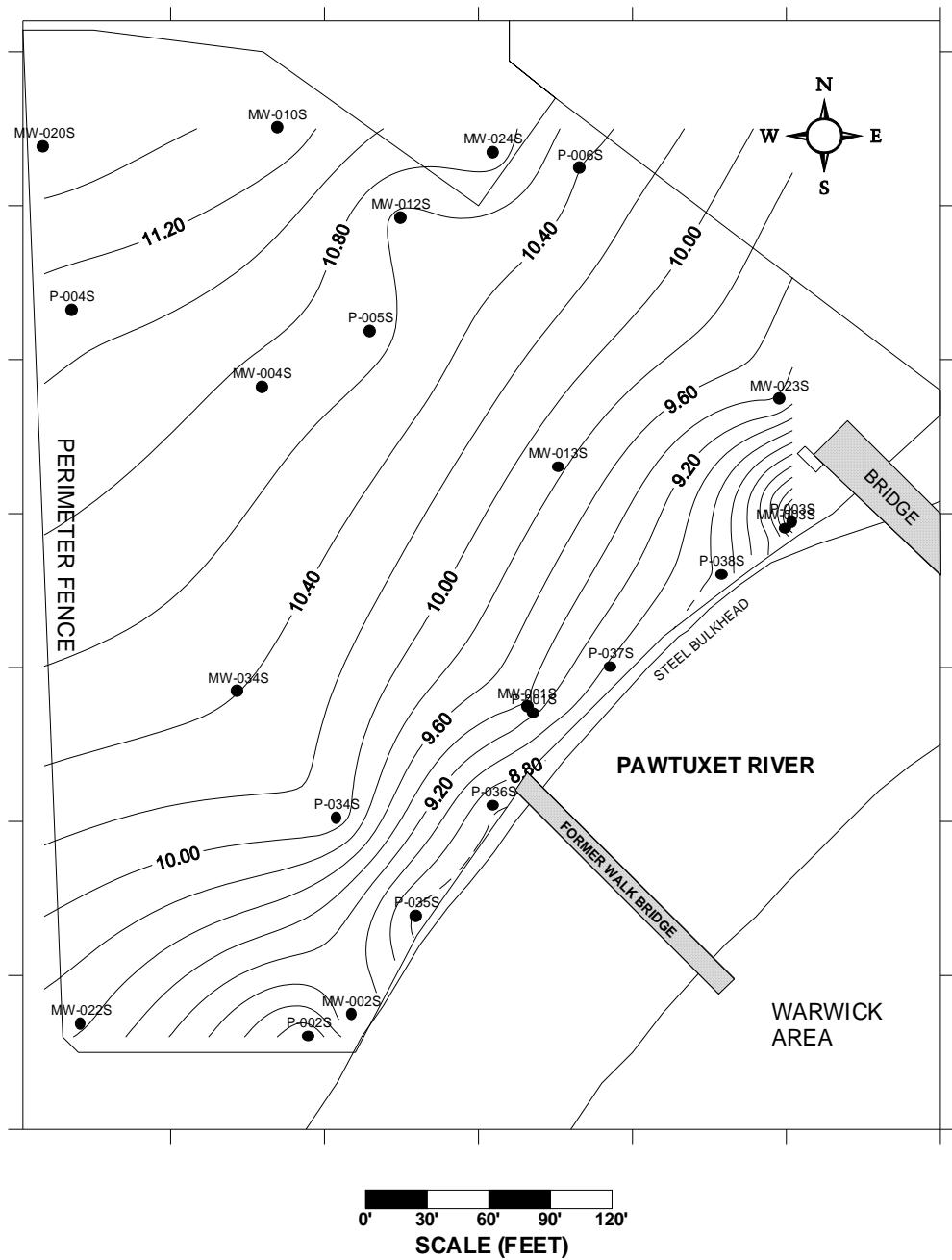
NA - Not Available

**Figure 1**

# BASF Corporation

## CRANSTON, RI FACILITY FORMER PRODUCTION AREA

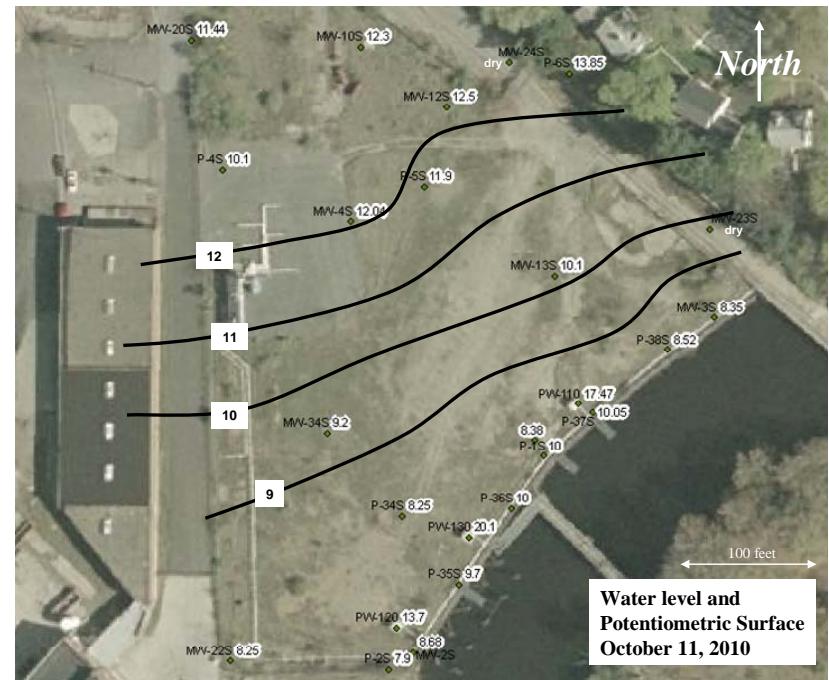
Pre-Pump & Treat Potentiometric Surface Map  
September 30, 1993



## Figure 2

### BASF Corporation

#### Cranston RI Facility Former Production Area



**APPENDIX B**  
**TIME-SERIES**  
**FOR**  
**UPGRADIENT WELLS**

**Table 3**  
**UPGRADIENT WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
MW-004S	6-Mar-96	89	210	1700	2100	300
MW-004S	1-May-96	88	130	1200	1500	160
MW-004S	9-Apr-97	43	44	160	88	100
MW-004S	8-Oct-97	72	41	660	370	480
MW-004S	28-Apr-98	40	220	1200	2700	130
MW-004S	15-Oct-98	100 U	580	300	100 U	100 U
MW-004S	16-Apr-99	50 U	50 U	50	50 U	730
MW-004S	27-Sep-99	31	93	400	20 U	79
MW-004S	20-Apr-00	74	170	20 U	84	20 U
MW-004S	22-Sep-00	30 U	240	30 U	30 U	30 U
MW-004S	19-Apr-01	1 U	1	36	1 U	2
MW-004S	18-Oct-01	2	5	20	1 U	1
MW-004S	5-Apr-02	1 U	1	1 U	1 U	1 U
MW-004S	11-Oct-02	1 U	1 U	5	1 U	1 U
MW-004S	2-Apr-03	1 U	3	5	66	4
MW-004S	2-Oct-03	6	11	72	1 U	4
MW-004S	17-Oct-04	10 U	12	90	10 U	10 U
MW-004S	11-Apr-05	38	180	280	1 U	13
MW-004S	19-Jun-06	3	4	92	1 U	3
MW-004S	6-Jul-06	4	7	94	1 U	3
MW-004S	14-Aug-06	1 U	1	26	1 U	1 U
MW-004S	6-Sep-06	1 U	1	1	1 U	1 U
MW-004S	10-Oct-06	1 U	120	10	1 U	1 U
MW-004S	6-Nov-06	7	180	30	1 U	4
MW-004S	6-Dec-06	1 U	1500	1 U	4	24
MW-004S	12-Mar-07	1 U	1 U	2	1 U	1 U
MW-004S	5-Apr-07	5	27	72	1 U	4
MW-004S	4-Jun-07	1 U	1	11	1 U	1 U
MW-004S	6-Sep-07	1	1 U	37	1 U	1
MW-004S	7-Dec-07	1 U	25	5	1 U	1 U
MW-004S	13-Mar-08	34	130	140	3	9
MW-004S	13-Jun-08	1 U	3	1	1 U	1 U
MW-004S	12-Sep-08	1 U	5	6	1 U	3
MW-004S	11-Dec-08	1	7	5	1 U	1 U
MW-004S	17-Mar-09	5	54	16	1 U	1 U
MW-004S	12-Jun-09	1 U	1 U	2	1 U	1 U
MW-004S	11-Sep-09	1 U	5	4	1 U	1 U
MW-004S	14-Dec-09	22	94	94	1 U	4
MW-004S	22-Mar-10	9	44	26	1 U	1
MW-004S	3-Jun-10	1 U	1 U	11	1 U	1 U
MW-004S	10-Sep-10	1 U	4	27	1 U	1 U
MW-004S	7-Dec-10	1	7	6	1 U	1 U
MW-012S	5-Mar-96	4.3 U	2.4 J	2 U	2.8 U	75
MW-012S	2-May-96	4.3 U	1.5 J	2 U	2.8 U	42
MW-012S	10-Apr-97	1 U	1 U	1 U	1 U	1 U
MW-012S	8-Oct-97	1 U	1 U	1 U	1 U	12
MW-012S	28-Apr-98	1 U	1 U	1 U	1 U	65
MW-012S	15-Oct-98	10 U	10 U	10 U	10 U	87
MW-012S	16-Apr-99	10 U	12	10 U	10 U	24
MW-012S	27-Sep-99	58	1 U	1 U	1 U	6
MW-012S	20-Apr-00	1 U	1 U	1 U	1 U	1
MW-012S	22-Sep-00	1 U	2	1 U	1 U	1

**Table 3 - Continued**  
**UPGRADIENT WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
MW-012S	18-Apr-01	1 U	1 U	1 U	1 U	25
MW-012S	18-Oct-01	1 U	3	1 U	1 U	1 U
MW-012S	5-Apr-02	1 U	1 U	1 U	1 U	1 U
MW-012S	11-Oct-02	1 U	1 U	1 U	1 U	1 U
MW-012S	2-Apr-03	1 U	1 U	1 U	1 U	2
MW-012S	2-Oct-03	1 U	1 U	1 U	1 U	1 U
MW-012S	17-Oct-04	1 U	1 U	1 U	1 U	1 U
MW-012S	11-Apr-05	1 U	1 U	1 U	1 U	1 U
MW-012S	19-Jun-06	1 U	1 U	1 U	1 U	1 U
MW-012S	6-Jul-06	1 U	1 U	1 U	1 U	1 U
MW-012S	14-Aug-06	1 U	1 U	1 U	1 U	1 U
MW-012S	6-Sep-06	1 U	1 U	1 U	1 U	1 U
MW-012S	10-Oct-06	1 U	49	4	1 U	1 U
MW-012S	6-Nov-06	1 U	24	3	1 U	1 U
MW-012S	6-Dec-06	1 U	31	3	1 U	1 U
MW-012S	12-Mar-07	1	1 U	1 U	1 U	1 U
MW-012S	5-Apr-07	1 U	1 U	1 U	1 U	1 U
MW-012S	4-Jun-07	1 U	1 U	1 U	1 U	1 U
MW-012S	6-Sep-07	1 U	1 U	1 U	1 U	1 U
MW-012S	7-Dec-07	1 U	1 U	1 U	1 U	1 U
MW-012S	13-Mar-08	1 U	1 U	1 U	1 U	3
MW-012S	13-Jun-08	1 U	1 U	1	1 U	1 U
MW-012S	11-Sep-08	1 U	1 U	3	1 U	1 U
MW-012S	11-Dec-08	1 U	1 U	1 U	1 U	1 U
MW-012S	17-Mar-09	1 U	1 U	1 U	1 U	1 U
MW-012S	12-Jun-09	1 U	1 U	1 U	1 U	1 U
MW-012S	11-Sep-09	1 U	5	1 U	1 U	1 U
MW-012S	11-Dec-09	1 U	2	1 U	1 U	1 U
MW-012S	22-Mar-10	1 U	1 U	1 U	1 U	1 U
MW-012S	4-Jun-10	1 U	1 U	1 U	1 U	1 U
MW-012S	16-Sep-10	1 U	2	1 U	1 U	1 U
MW-012S	7-Dec-10	1 U	1 U	1 U	1 U	1 U
MW-021S	6-Mar-96	43 U	30 U	480	12 J	34 U
MW-021S	1-May-96	22 U	5 J	820	15	17 U
MW-021S	10-Apr-97	1 U	1 U	120	1	6
MW-021S	27-Oct-97	30	49	24000	20000	1600
MW-021S	28-Apr-98	1 U	1 U	54	1 U	1 U
MW-021S	15-Oct-98	100 U	100 U	7900	2500	580
MW-021S	15-Apr-99	50 U	50 U	9000	50 U	520
MW-021S	27-Sep-99	40 U	40 U	8100	40 U	110
MW-021S	20-Apr-00	40 U	40 U	11000	40 U	40 U
MW-021S	22-Sep-00	500 U	500 U	16000	500 U	500 U
MW-021S	19-Apr-01	10 U	10 U	440	10 U	10 U
MW-021S	18-Oct-01	50 U	50 U	12000	270	210
MW-021S	5-Apr-02	10 U	10 U	420	10 U	10 U
MW-021S	11-Oct-02	2	2	940	6	38
MW-021S	2-Apr-03	1 U	1 U	72	1 U	1
MW-021S	3-Oct-03	6	10	3300	38	72
MW-021S	18-Oct-04	1 U	1 U	170	1 U	1 U
MW-021S	12-Apr-05	1 U	2	100	1 U	1
MW-021S	19-Jun-06	1 U	1 U	890	4	2
MW-021S	6-Jul-06	1 U	34	880	1 U	1 U
MW-021S	14-Aug-06	1 U	1 U	2200	1 U	1 U
MW-021S	6-Sep-06	1 U	1 U	1800	1 U	1 U
MW-021S	6-Oct-06	1 U	1 U	1800	1 U	1 U
MW-021S	6-Nov-06	1 U	18	420	1 U	1 U
MW-021S	6-Dec-06	1 U	21	330	1 U	1 U

**Table 3 - Continued**  
**UPGRADIENT WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

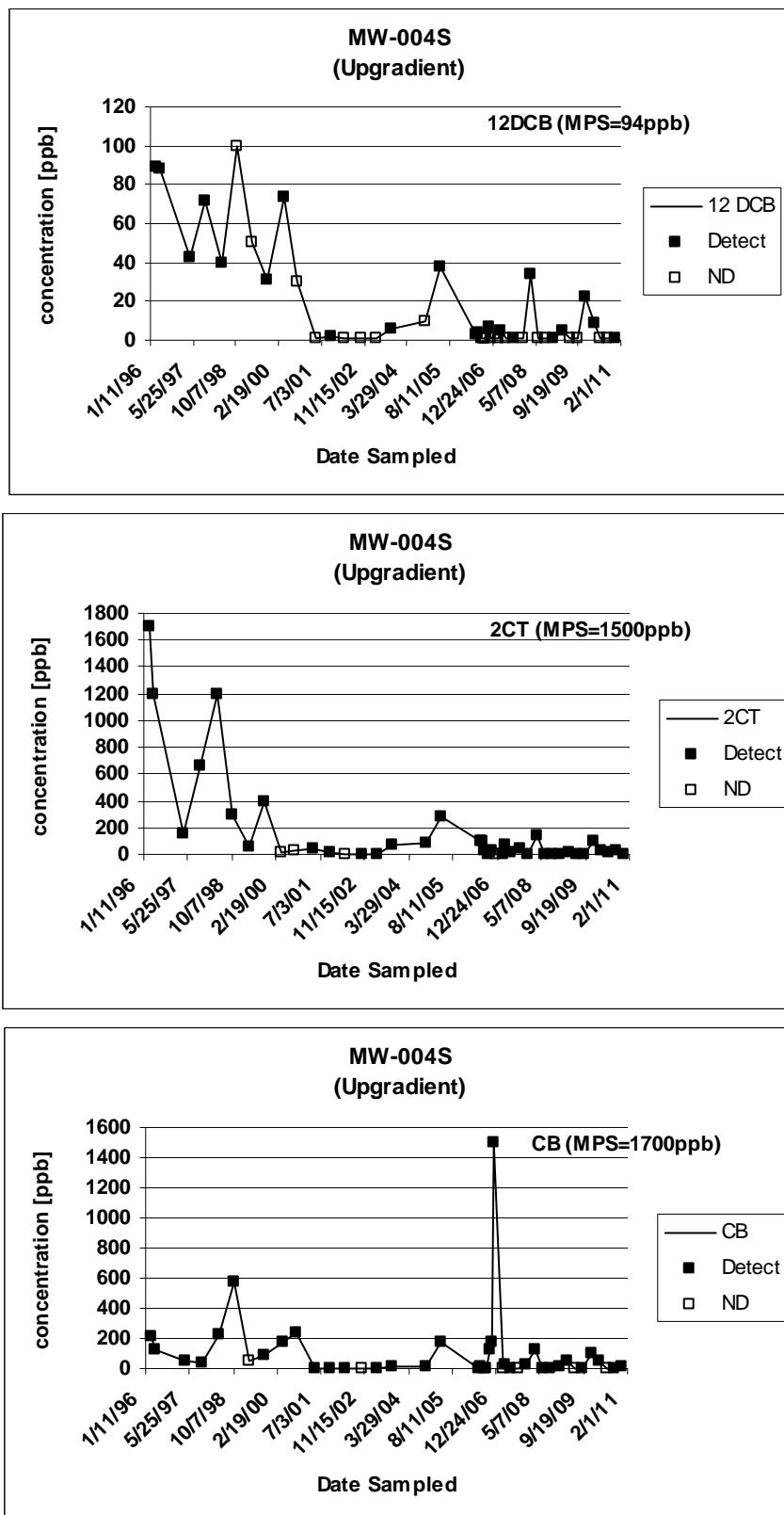
Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
MW-021S	12-Mar-07	1 U	1 U	180	1 U	1 U
MW-021S	5-Apr-07	1 U	1 U	120	1 U	1 U
MW-021S	4-Jun-07	1 U	1 U	640	1 U	1 U
MW-021S	6-Sep-07	1 U	16	2000	1 U	1 U
MW-021S	7-Dec-07	1 U	22	1200	1 U	1 U
MW-021S	13-Mar-08	1 U	1 U	62	1 U	1 U
MW-021S	13-Jun-08	2	1 U	1600	6	16
MW-021S	12-Sep-08	1 U	1 U	330	1 U	10
MW-021S	11-Dec-08	1 U	1 U	680	1 U	1 U
MW-021S	17-Mar-09	1 U	1 U	200	1 U	1 U
MW-021S	12-Jun-09	10 U	10 U	1000	10 U	10 U
MW-021S	11-Sep-09	1	1	840	2	4
MW-021S	14-Dec-09	1 U	1 U	2	1 U	1 U
MW-021S	22-Mar-10	1 U	1 U	7	1 U	1 U
MW-021S	4-Jun-10	1 U	1 U	200	1	1 U
MW-021S	16-Sep-10	1 U	2	540	2	3
MW-021S	7-Dec-10	1 U	1 U	13	1 U	1 U

MPS = Media Protection Standard

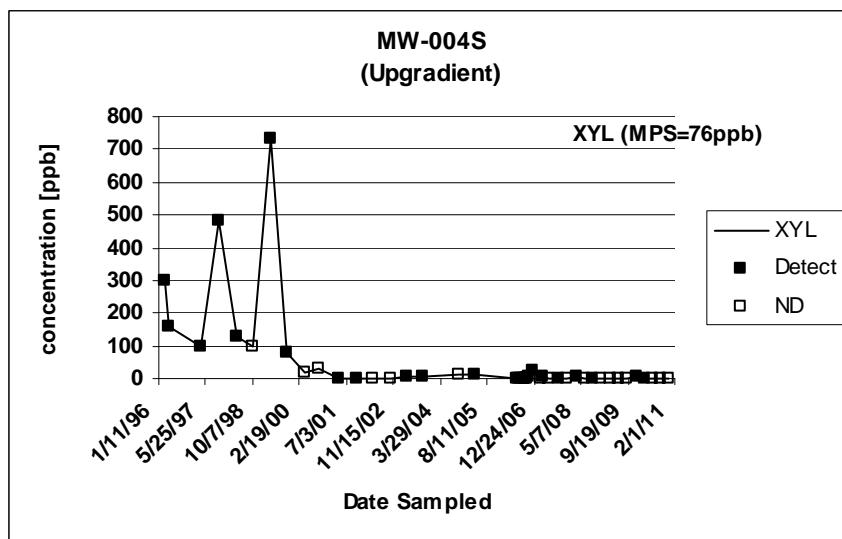
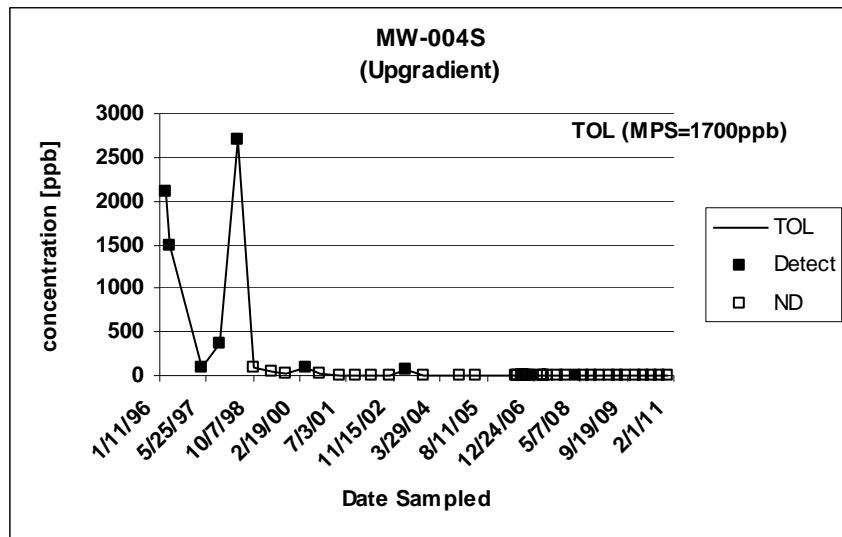
U = Nondetect with detection limit given

J = Estimated value

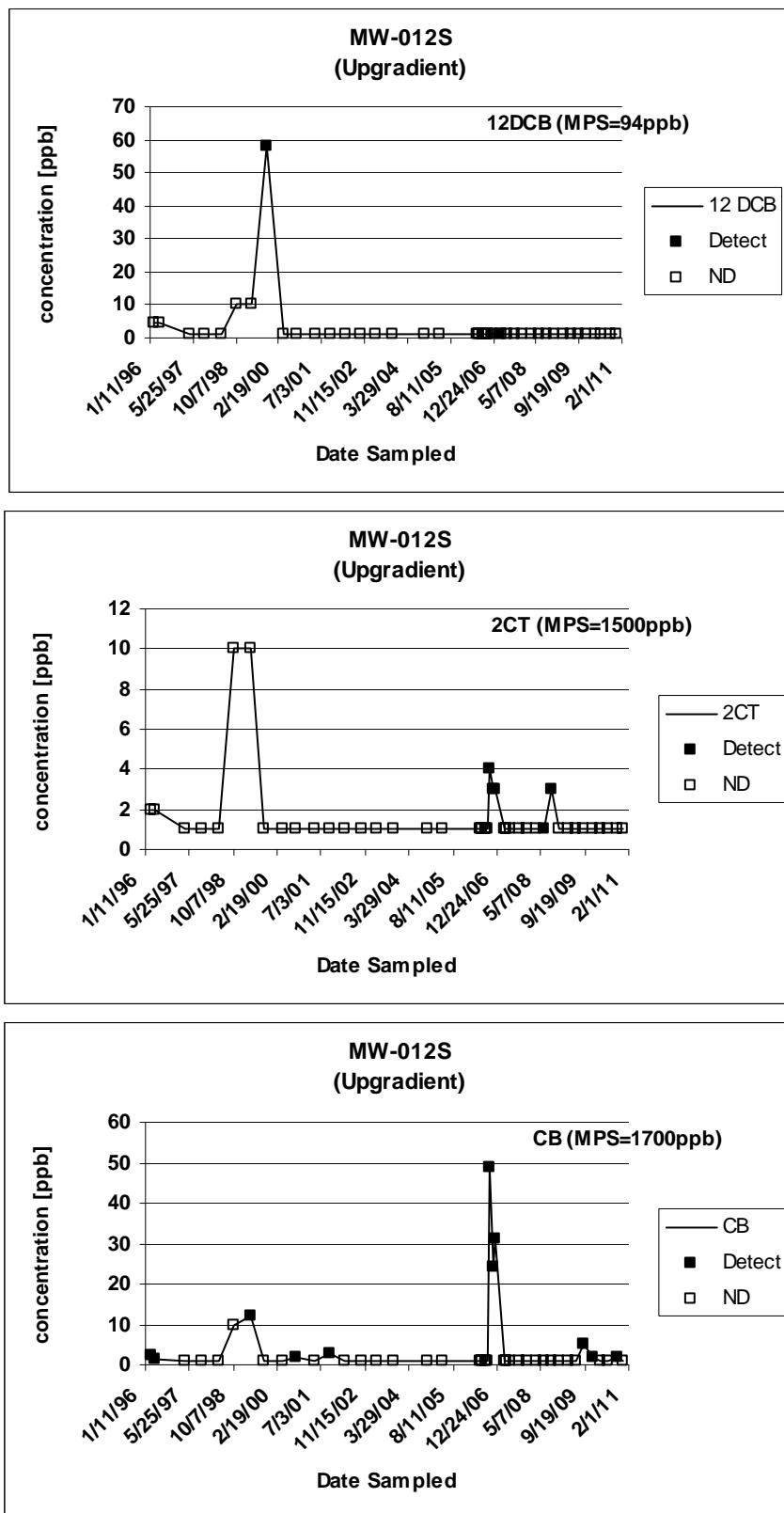
BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



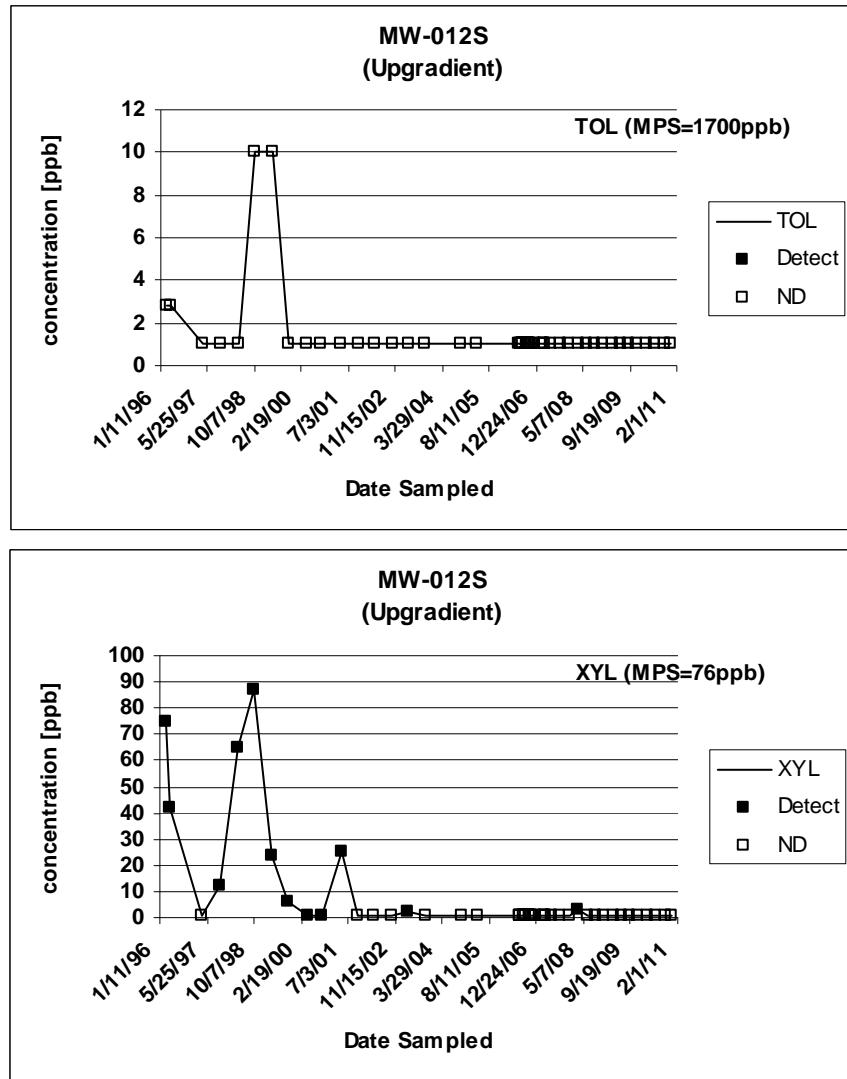
BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



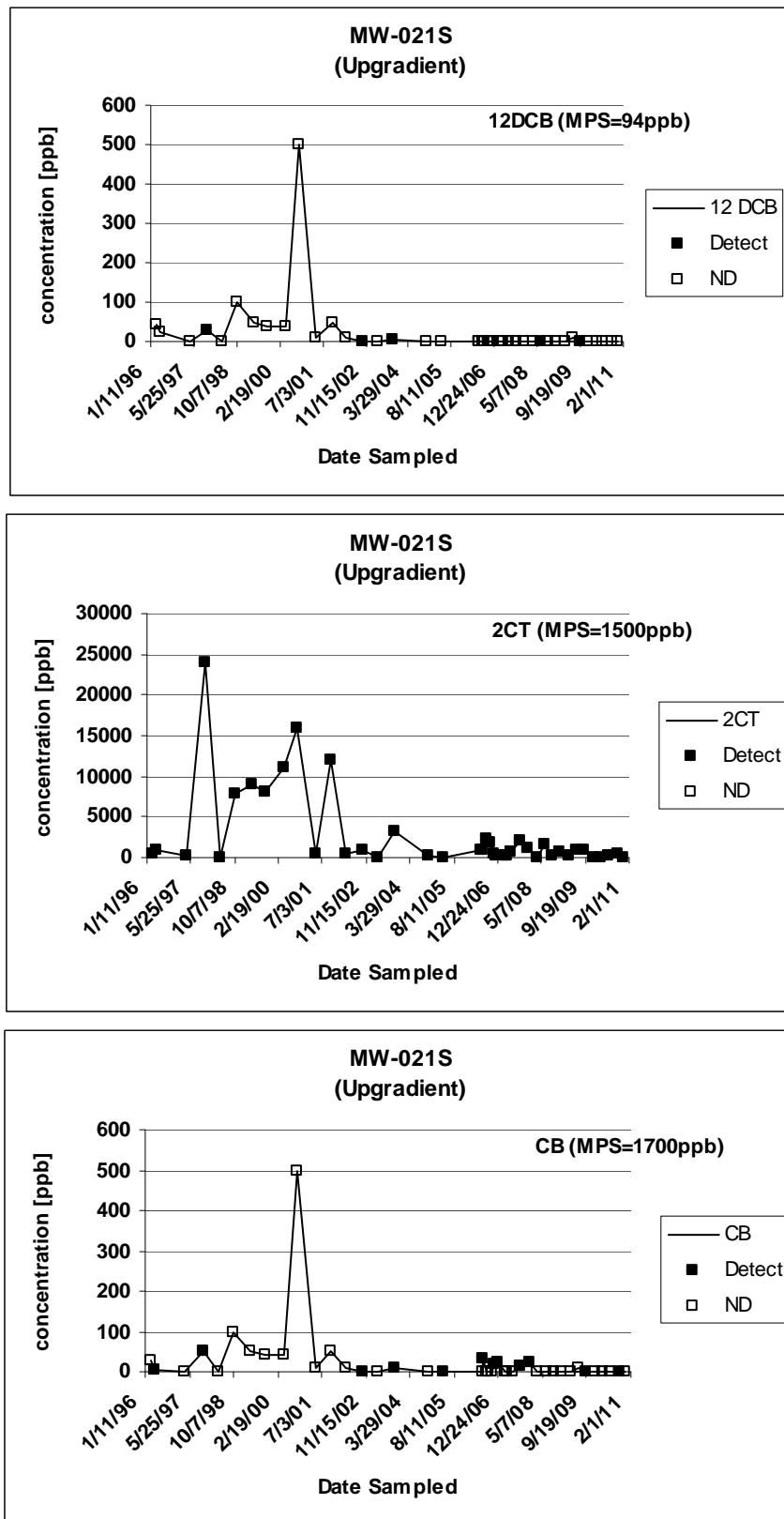
BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



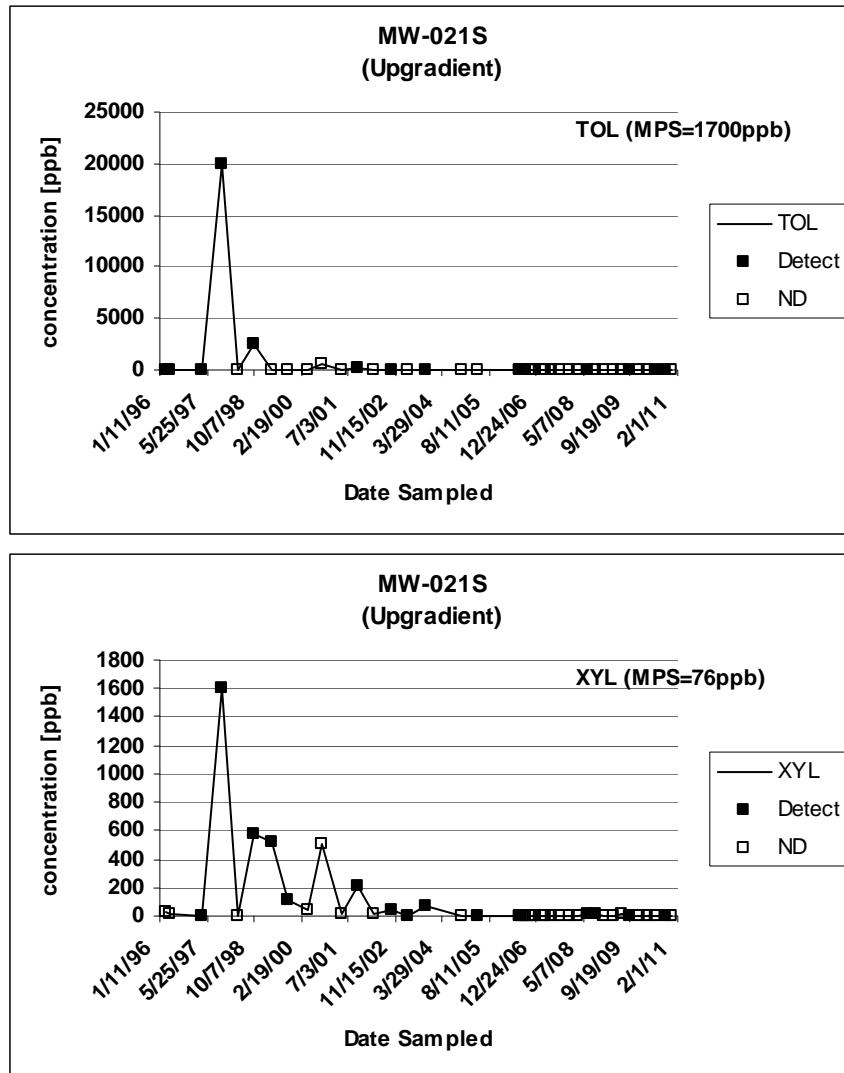
BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



**APPENDIX C**

**TIME-SERIES GRAPHS**

**FOR**

**BULKHEAD WELLS**

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No. MPS	Date Sampled	1,2-Dichloro- benzene 94	Chloro- benzene 1700	o-Chloro- toluene 1500	Toluene 1700	Xylenes 76
MW-001S	6-Mar-96	22 U	2000	10 U	16	18
MW-001S	1-May-96	110 U	5500	50 U	30 J	85 U
MW-001S	10-Apr-97	1	93	1 U	9	7
MW-001S	7-Oct-97	1	640	30	23	2
MW-001S	27-Apr-98	1 U	2800	1 U	1	2
MW-001S	15-Oct-98	100 U	2800	100 U	100 U	100 U
MW-001S	15-Apr-99	50 U	50 U	50 U	50 U	50 U
MW-001S	27-Sep-99	40 U	2300	40 U	40 U	40 U
MW-001S	20-Apr-00	40 U	40 U	40 U	40 U	40 U
MW-001S	21-Sep-00	450	2500	1 U	1 U	1 U
MW-001S	18-Apr-01	10 U	1600	10 U	10 U	10 U
MW-001S	18-Oct-01	10 U	1700	10 U	10 U	10 U
MW-001S	4-Apr-02	10 U	1700	10 U	10 U	10 U
MW-001S	11-Oct-02	10 U	1800	10 U	10 U	10 U
MW-001S	2-Apr-03	10 U	320	10 U	10 U	10 U
MW-001S	2-Oct-03	10 U	1300	10 U	10 U	10 U
MW-001S	17-Oct-04	10 U	1000	10 U	10 U	10 U
MW-001S	11-Apr-05	1 U	410	10 U	10 U	50 U
MW-001S	19-Jun-06	1 U	1100	1 U	1 U	1 U
MW-001S	6-Jul-06	1 U	700	1 U	1 U	1 U
MW-001S	14-Aug-06	1 U	1400	1 U	1 U	1 U
MW-001S	6-Sep-06	1 U	1400	1 U	1 U	1 U
MW-001S	10-Oct-06	1 U	1600	1 U	1 U	13
MW-001S	6-Nov-06	1 U	1600	1 U	1 U	1 U
MW-001S	6-Dec-06	1 U	87	60	1 U	4
MW-001S	12-Mar-07	1 U	1700	1 U	1 U	33
MW-001S	5-Apr-07	1 U	1400	1 U	1 U	1 U
MW-001S	4-Jun-07	1 U	1600	1 U	1 U	29
MW-001S	6-Sep-07	1 U	1600	1 U	1 U	20
MW-001S	6-Dec-07	1 U	1400	10	1 U	1 U
MW-001S	12-Mar-08	1 U	210	1 U	1 U	1 U
MW-001S	12-Jun-08	1 U	1600	1 U	3	50
MW-001S	11-Sep-08	1 U	1500	3	4	3
MW-001S	10-Dec-08	1 U	1400	1 U	1 U	43
MW-001S	17-Mar-09	1 U	1300	1 U	1 U	1 U
MW-001S	11-Jun-09	1 U	1300	1 U	1	43
MW-001S	11-Sep-09	1 U	1600	1 U	2	32
MW-001S	11-Dec-09	1 U	800	1 U	2	10
MW-001S	12-Mar-10	1 U	890	1 U	2	1 U
MW-001S	3-Jun-10	1 U	1500	1	1	27
MW-001S	9-Sep-10	1 U	1200	1 U	2	39
MW-001S	6-Dec-10	10 U	1600	10 U	10 U	57
MW-002S	5-Mar-96	340	3200	50 U	200	85 U
MW-002S	30-Apr-96	44 J	2500	50 U	52 J	85 U
MW-002S	8-Apr-97	20	64	1 U	46	18
MW-002S	7-Oct-97	90	440	100	97	31
MW-002S	27-Apr-98	22	500	1 U	88	28
MW-002S	15-Oct-98	28	5200	1 U	92	34
MW-002S	15-Apr-99	140	2260	10 U	420	33
MW-002S	27-Sep-99	43	2800	40 U	40 U	40 U
MW-002S	20-Apr-00	1340	12000	150	830	120
MW-002S	21-Sep-00	930	9400	500 U	500 U	500 U
MW-002S	18-Apr-01	50 U	1400	50 U	95	50 U
MW-002S	18-Oct-01	1800	12000	170	120	33

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No. MPS	Date Sampled	1,2-Dichloro- benzene 94	Chloro- benzene 1700	o-Chloro- toluene 1500	Toluene 1700	Xylenes 76
MW-002S	5-Apr-02	360	4700	100 U	230	50 U
MW-002S	11-Oct-02	360	8800	50 U	140	50 U
MW-002S	3-Apr-03	66	2000	50 U	200	50 U
MW-002S	3-Oct-03	500	7000	50 U	120	50 U
MW-002S	17-Oct-04	50 U	1600	58	110	50 U
MW-002S	11-Apr-05	50 U	2800	50 U	160	50 U
MW-002S	26-Jul-05	31	740	82	15	13
MW-002S	26-Aug-05	29	740	69	15	10 U
MW-002S	26-Sep-05	1 U	1	1 U	1 U	1 U
MW-002S	11-Nov-05	30	1700	42	79	21
MW-002S	28-Dec-05	22	1100	38	73	10 U
MW-002S	19-Jun-06	1 U	850	1 U	46	1 U
MW-002S	6-Jul-06	1 U	1100	1 U	120	1 U
MW-002S	14-Aug-06	23	1200	43	76	1 U
MW-002S	6-Sep-06	14	1100	27	68	1 U
MW-002S	10-Oct-06	24	1400	54	70	1 U
MW-002S	6-Nov-06	1 U	280	1 U	1 U	1 U
MW-002S	6-Dec-06	4	190	7	3	1 U
MW-002S	12-Mar-07	13	1000	1 U	57	1 U
MW-002S	5-Apr-07	2	100	1 U	1	1 U
MW-002S	4-Jun-07	4	200	1	3	1 U
MW-002S	6-Sep-07	140	1200	140	13	14
MW-002S	7-Dec-07	18	1200	25	5	6
MW-002S	12-Mar-08	1 U	940	1 U	38	1 U
MW-002S	12-Jun-08	25	1300	72	66	12
MW-002S	11-Sep-08	14	680	38	24	1
MW-002S	10-Dec-08	11	1100	37	58	1 U
MW-002S	17-Mar-09	10	1200	41	78	6
MW-002S	11-Jun-09	10	670	52	10	10
MW-002S	11-Sep-09	14	730	1 U	14	3
MW-002S	11-Dec-09	7	910	18	57	2
MW-002S	22-Mar-10	6	1400	2	45	4
MW-002S	3-Jun-10	13	500	44	35	8
MW-002S	10-Sep-10	12	1500	28	59	10 U
MW-002S	6-Dec-10	15	1400	63	48	1 U
P-035S	8-Apr-97	22	74	1 U	4	12
P-035S	7-Oct-97	240	710	2	10	12
P-035S	27-Apr-98	42	360	1 U	2	10
P-035S	15-Oct-98	140	2100	10 U	130	80
P-035S	15-Apr-99	20	480	10 U	10 U	10 U
P-035S	27-Sep-99	40 U	40 U	40 U	40 U	40 U
P-035S	20-Apr-00	4580	77000	300	160	56
P-035S	21-Sep-00	6600	11000	500 U	500 U	500 U
P-035S	18-Apr-01	2000	2100	67	50 U	50 U
P-035S	18-Oct-01	9000	11000	310	81	34

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No. MPS	Date Sampled	1,2-Dichloro- benzene 94	Chloro- benzene 1700	o-Chloro- toluene 1500	Toluene 1700	Xylenes 76
P-035S	4-Apr-02	9600	8800	380	100 U	50 U
P-035S	11-Oct-02	1300	970	79	10 U	10 U
P-035S	3-Apr-03	97	280	11	10 U	10 U
P-035S	3-Oct-03	240	610	67	10 U	10 U
P-035S	17-Oct-04	18	200	130	10 U	10 U
P-035S	12-Apr-05	10 U	460	10 U	10 U	10 U
P-035S	26-Aug-05	10 U	300	110	10 U	10 U
P-035S	26-Sep-05	19	750	54	28	10 U
P-035S	29-Nov-05	18	480	84	10 U	12
P-035S	28-Dec-05	11	260	58	10	10 U
P-035S	19-Jun-06	13	530	88	1 U	1 U
P-035S	6-Jul-06	13	1900	100	1 U	1 U
P-035S	14-Aug-06	1 U	1700	100	1 U	1 U
P-035S	6-Sep-06	27	2400	140	1 U	1 U
P-035S	10-Oct-06	41	5800	170	1 U	1 U
P-035S	6-Nov-06	69	5600	180	1 U	1 U
P-035S	6-Dec-06	72	6200	190	1 U	1 U
P-035S	12-Mar-07	67	3000	140	1 U	1 U
P-035S	5-Apr-07	50	5100	120	1 U	1 U
P-035S	4-Jun-07	81	8200	120	1 U	1 U
P-035S	6-Sep-07	20	760	100	1 U	1 U
P-035S	6-Dec-07	1 U	390	49	1 U	1 U
P-035S	12-Mar-08	10	280	65	1	8
P-035S	12-Jun-08	9	350	120	1 U	4
P-035S	11-Sep-08	9	190	76	1 U	12
P-035S	10-Dec-08	1 U	270	81	1 U	1 U
P-035S	17-Mar-09	1 U	260	86	1 U	1 U
P-035S	11-Jun-09	6	240	91	5 U	5 U
P-035S	11-Sep-09	6	260	110	1 U	2
P-035S	11-Dec-09	7	210	66	1 U	2
P-035S	12-Mar-10	5	220	97	1 U	1 U
P-035S	2-Jun-10	8	1300	49	1 U	4
P-035S	10-Sep-10	11	830	48	10 U	10 U
P-035S	6-Dec-10	11	1600	61	10 U	1 U
P-036S	6-Mar-96	22 U	440	10 U	14 U	17 U
P-036S	1-May-96	22 U	460	30	14 U	17 U
P-036S	8-Apr-97	1 U	72	1 U	1 U	2
P-036S	7-Oct-97	1 U	35	9	2	1 U
P-036S	27-Apr-98	1 U	260	1 U	1 U	1 U
P-036S	15-Oct-98	1 U	230	1 U	1 U	1
P-036S	15-Apr-99	10 U	200	10 U	10 U	10 U
P-036S	27-Sep-99	10 U	450	10 U	10 U	10 U
P-036S	20-Apr-00	1 U	290	1 U	1 U	1 U

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No. MPS	Date Sampled	1,2-Dichloro- benzene 94	Chloro- benzene 1700	o-Chloro- toluene 1500	Toluene 1700	Xylenes 76
P-036S	21-Sep-00	30 U	300	30 U	30 U	30 U
P-036S	18-Apr-01	10 U	280	10 U	10 U	10 U
P-036S	18-Oct-01	1 U	170	1 U	1 U	1 U
P-036S	4-Apr-02	1 U	230	1 U	1	1 U
P-036S	11-Oct-02	1	410	6	1 U	1 U
P-036S	3-Apr-03	10 U	210	10 U	10 U	10 U
P-036S	2-Oct-03	10 U	420	10 U	10 U	10 U
P-036S	17-Oct-04	10 U	350	11	10 U	10 U
P-036S	12-Apr-05	12	220	31	10 U	10 U
P-036S	26-Aug-05	10 U	1100	80	10 U	10 U
P-036S	26-Sep-05	1 U	55	15	1 U	1 U
P-036S	29-Nov-05	10 U	820	54	10 U	10 U
P-036S	28-Dec-05	1	17	18	1 U	1 U
P-036S	19-Jun-06	4	790	69	2	4
P-036S	6-Jul-06	1 U	740	41	1 U	1 U
P-036S	14-Aug-06	1 U	640	37	1 U	1 U
P-036S	6-Sep-06	1 U	800	74	1 U	1 U
P-036S	10-Oct-06	1 U	840	36	1 U	1 U
P-036S	6-Nov-06	1 U	360	11	1 U	1 U
P-036S	6-Dec-06	1 U	460	13	1 U	1 U
P-036S	12-Mar-07	1 U	330	1 U	1 U	1 U
P-036S	5-Apr-07	1 U	300	1 U	1 U	1 U
P-036S	4-Jun-07	1 U	360	18	1 U	1 U
P-036S	6-Sep-07	1 U	650	82	1 U	1 U
P-036S	6-Dec-07	1 U	380	48	1 U	1 U
P-036S	12-Mar-08	2	300	14	1 U	1
P-036S	12-Jun-08	5	630	73	1 U	4
P-036S	11-Sep-08	4	540	45	1 U	11
P-036S	10-Dec-08	1 U	420	16	1 U	1 U
P-036S	17-Mar-09	1 U	390	17	1 U	1 U
P-036S	11-Jun-09	5 U	410	35	5 U	5 U
P-036S	11-Sep-09	3	520	39	1 U	1
P-036S	11-Dec-09	1	310	9	1 U	1 U
P-036S	12-Mar-10	2	350	33	1 U	1 U
P-036S	2-Jun-10	1	240	11	1 U	1 U
P-036S	10-Sep-10	10 U	320	14	10 U	10 U
P-036S	6-Dec-10	10 U	200	10 U	10 U	1 U
P-037S	9-Apr-97	2 U	54	16	1 U	1
P-037S	8-Oct-97	2	50	13	1 U	1 U
P-037S	28-Apr-98	2	420	8	1 U	1 U
P-037S	15-Oct-98	30 U	540	30 U	30 U	30 U
P-037S	15-Apr-99	10 U	210	10 U	10 U	10 U
P-037S	27-Sep-99	10 U	660	10 U	10 U	10 U
P-037S	20-Apr-00	1 U	460	5	1 U	1 U

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

Well No. MPS	Date Sampled	1,2-Dichloro- benzene 94	Chloro- benzene 1700	o-Chloro- toluene 1500	Toluene 1700	Xylenes 76
P-037S	21-Sep-00	30 U	370	30 U	30 U	30 U
P-037S	18-Apr-01	10 U	330	10 U	10 U	10 U
P-037S	18-Oct-01	2	240	1 U	1 U	1 U
P-037S	4-Apr-02	10 U	360	10 U	10 U	10 U
P-037S	11-Oct-02	10 U	420	10 U	10 U	10 U
P-037S	2-Apr-03	10 U	270	10 U	10 U	10 U
P-037S	2-Oct-03	10 U	350	10 U	10 U	10 U
P-037S	16-Oct-04	10 U	350	10 U	10 U	10 U
P-037S	12-Apr-05	10 U	220	10 U	10 U	10 U
P-037S	26-Aug-05	2	82	35	1 U	1 U
P-037S	26-Sep-05	2	800	25	2	4
P-037S	29-Nov-05	1	36	20	1 U	1 U
P-037S	28-Dec-05	4	750	87	1 U	7
P-037S	19-Jun-06	1 U	9	18	1 U	1 U
P-037S	6-Jul-06	1 U	10	17	1 U	1 U
P-037S	14-Aug-06	1 U	9	20	1 U	1 U
P-037S	6-Sep-06	1	12	22	1 U	1 U
P-037S	10-Oct-06	2	210	25	1 U	1
P-037S	6-Nov-06	1 U	12	12	1 U	1 U
P-037S	6-Dec-06	1 U	1 U	16	1 U	1 U
P-037S	12-Mar-07	1	6	23	1 U	1 U
P-037S	5-Apr-07	2	8	37	1 U	1
P-037S	4-Jun-07	2	8	40	1 U	1 U
P-037S	6-Sep-07	5	5	74	1 U	1
P-037S	6-Dec-07	2	4	26	1 U	1 U
P-037S	12-Mar-08	2	8	21	1 U	1
P-037S	12-Jun-08	4	7	97	1 U	3
P-037S	11-Sep-08	1 U	3	14	1 U	1 U
P-037S	10-Dec-08	1 U	3	14	1 U	3
P-037S	17-Mar-09	1 U	2	14	1 U	1 U
P-037S	11-Jun-09	1 U	2	8	1 U	1 U
P-037S	11-Sep-09	1 U	3	4	1 U	1 U
P-037S	11-Dec-09	1 U	4	6	1 U	1 U
P-037S	12-Mar-10	1 U	3	9	1 U	1 U
P-037S	2-Jun-10	1 U	4	16	1 U	1 U
P-037S	9-Sep-10	1 U	2	16	1 U	1 U
P-037S	6-Dec-10	1	3	19	1 U	1 U
P-038S	6-Mar-96	4.3 U	2.4 J	2 U	1.3 J	3.4 U
P-038S	1-May-96	4.3 U	1.2 J	2 U	2.8 U	3.4 U
P-038S	9-Apr-97	1 U	1 U	1 U	1 U	1 U
P-038S	8-Oct-97	1 U	1 U	1 U	1 U	1 U
P-038S	28-Apr-98	1 U	1 U	1 U	1 U	1 U
P-038S	15-Oct-98	1 U	2	1 U	1 U	1 U
P-038S	15-Apr-99	1 U	1 U	1 U	1 U	1 U
P-038S	27-Sep-99	1 U	1	1 U	1 U	1 U

**Table 4**  
**BULKHEAD WELLS**  
**Cumulative Results for Chemicals Of Concern**  
**(Units in ppb)**

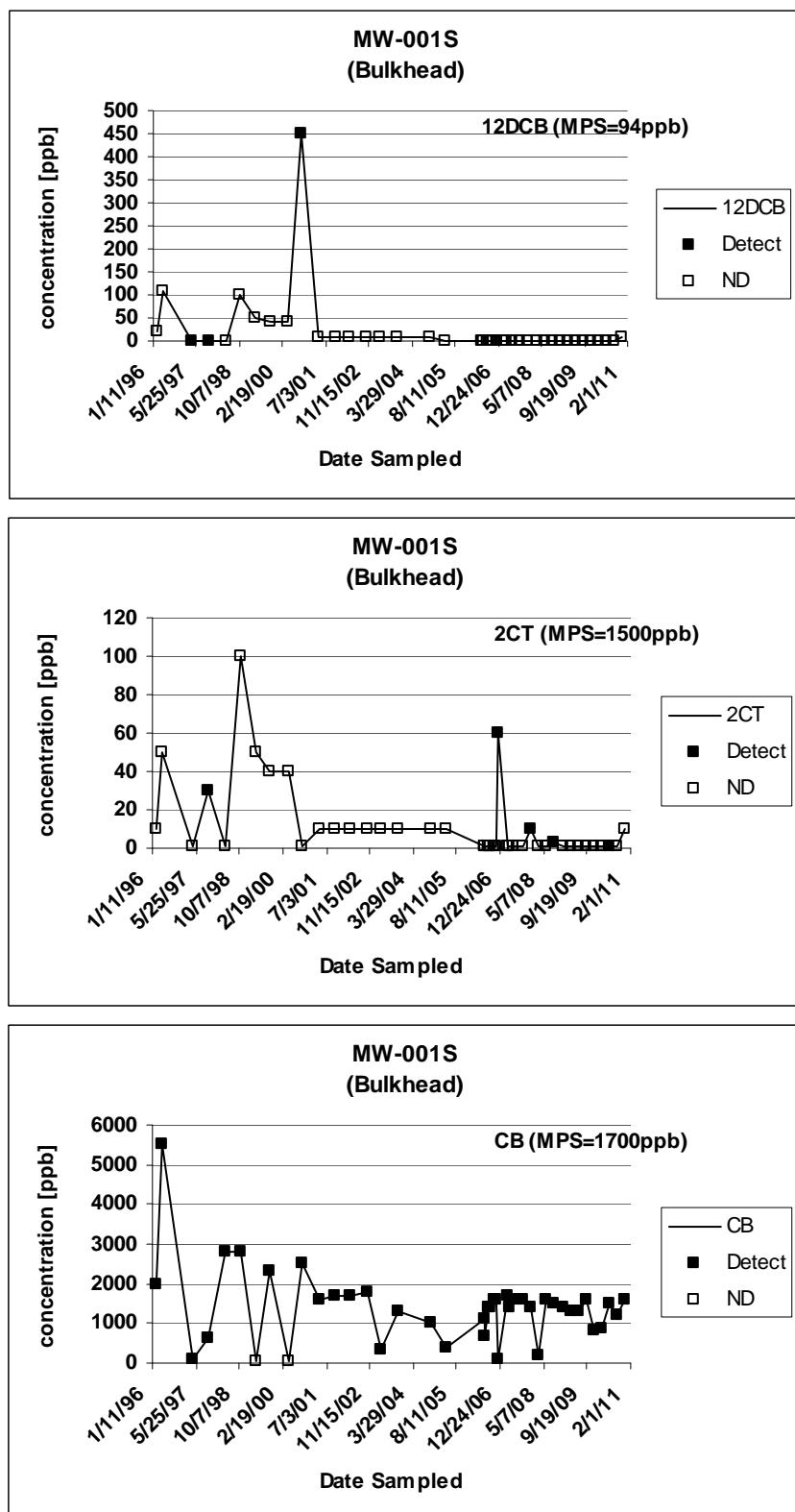
Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
P-038S	20-Apr-00	1 U	1 U	1 U	1 U	1 U
P-038S	21-Sep-00	1 U	1	1 U	1 U	1 U
P-038S	18-Apr-01	1 U	1 U	1 U	1 U	1 U
P-038S	18-Oct-01	1 U	6	1 U	1 U	1 U
P-038S	4-Apr-02	1 U	2	1 U	1 U	1 U
P-038S	11-Oct-02	1 U	1 U	1 U	1 U	1 U
P-038S	2-Apr-03	1 U	1 U	1 U	1 U	1 U
P-038S	2-Oct-03	1 U	1 U	1 U	1 U	1 U
P-038S	16-Oct-04	1 U	1 U	1 U	1 U	1 U
P-038S	11-Apr-05	1 U	1 U	1 U	1 U	1 U
P-038S	26-Aug-05	1 U	1 U	1 U	1 U	1 U
P-038S	26-Sep-05	16	460	80	2	11
P-038S	29-Nov-05	1 U	2	1 U	1 U	1 U
P-038S	28-Dec-05	1 U	1	1 U	1 U	1 U
P-038S	19-Jun-06	1 U	1 U	1 U	1 U	1 U
P-038S	6-Jul-06	1 U	1	1 U	1 U	1 U
P-038S	14-Aug-06	1 U	9	1 U	1 U	1 U
P-038S	6-Sep-06	1 U	1	1 U	1 U	1 U
P-038S	10-Oct-06	1 U	97	5	1 U	1 U
P-038S	6-Nov-06	1 U	1	1 U	1 U	1 U
P-038S	6-Dec-06	1 U	1 U	1 U	1 U	1 U
P-038S	12-Mar-07	1 U	1 U	1	1 U	1 U
P-038S	5-Apr-07	1 U	1 U	1 U	1 U	1 U
P-038S	4-Jun-07	1 U	1 U	1 U	1 U	1 U
P-038S	6-Sep-07	1 U	1 U	1 U	1 U	1 U
P-038S	6-Dec-07	1 U	1 U	1 U	1 U	1 U
P-038S	12-Mar-08	1 U	1 U	1 U	1 U	1 U
P-038S	12-Jun-08	1 U	1 U	1 U	1 U	1 U
P-038S	11-Sep-08	1 U	1 U	1 U	1 U	1 U
P-038S	10-Dec-08	1 U	1 U	1 U	1 U	1 U
P-038S	17-Mar-09	1 U	1 U	1 U	1 U	1 U
P-038S	11-Jun-09	1 U	1 U	1 U	1 U	1 U
P-038S	11-Sep-09	1 U	1 U	1 U	1 U	1 U
P-038S	11-Dec-09	1 U	1 U	1 U	1 U	1 U
P-038S	12-Mar-10	1 U	1 U	1 U	1 U	1 U
P-038S	2-Jun-10	1 U	1 U	5	1 U	1 U
P-038S	9-Sep-10	1 U	1 U	1 U	1 U	1 U
P-038S	6-Dec-10	1 U	1 U	1 U	1 U	1 U

MPS = Media Protection Standard

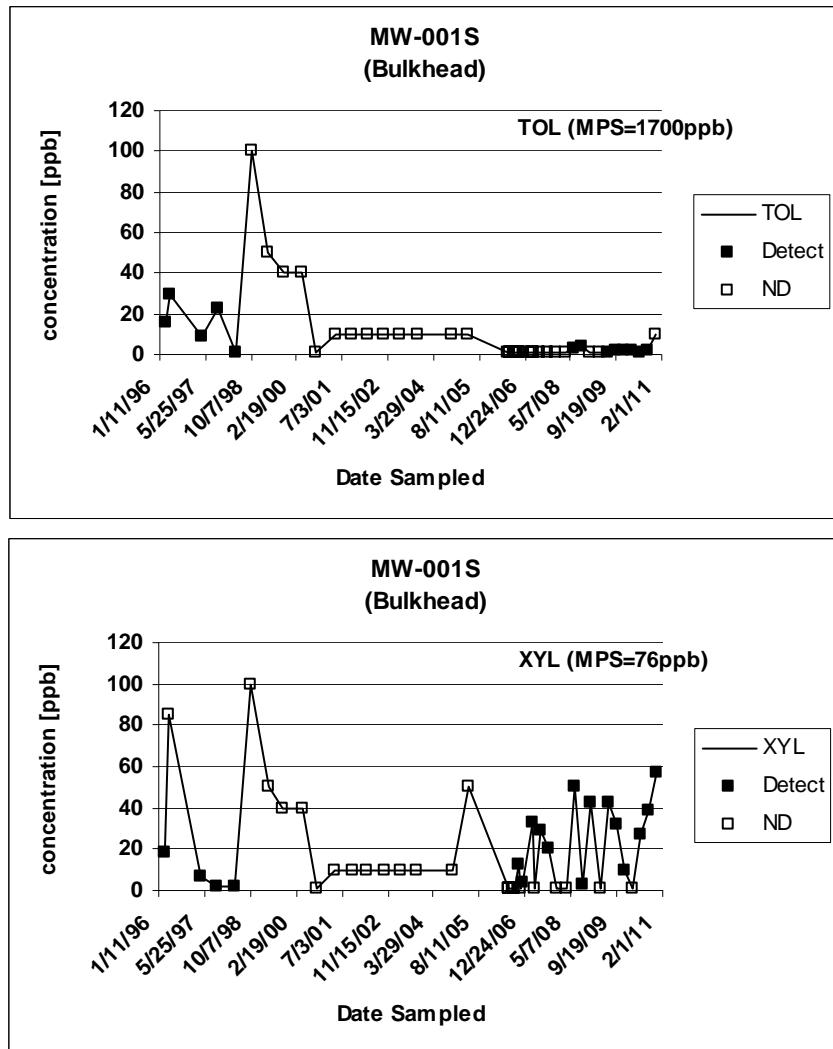
U = Nondetect with detection limit given

J = Estimated value

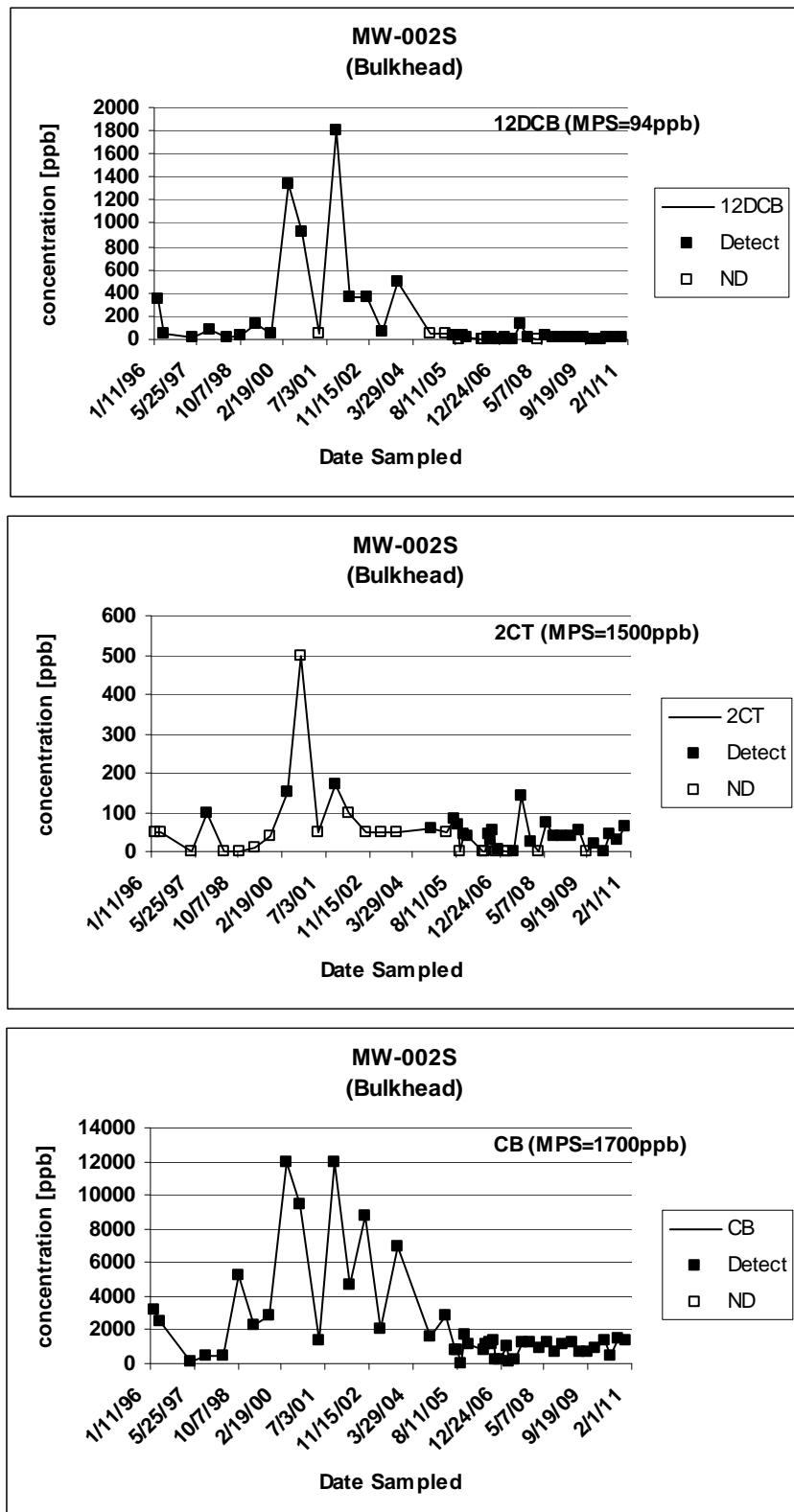
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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



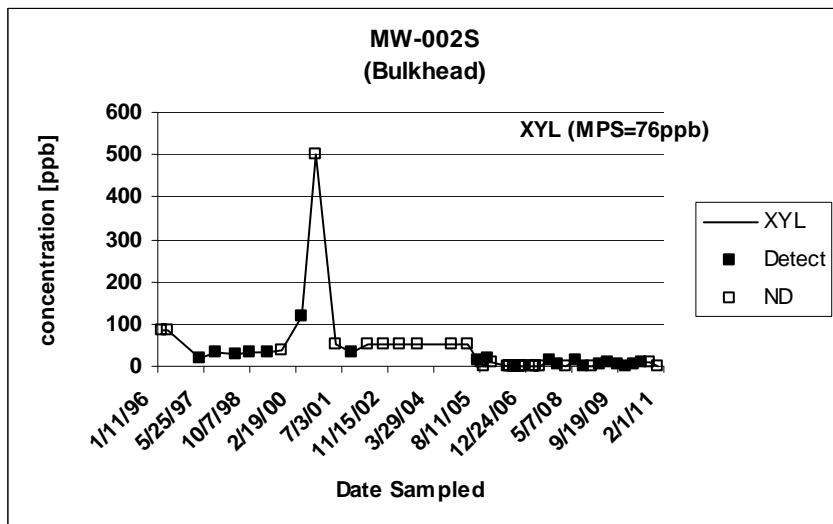
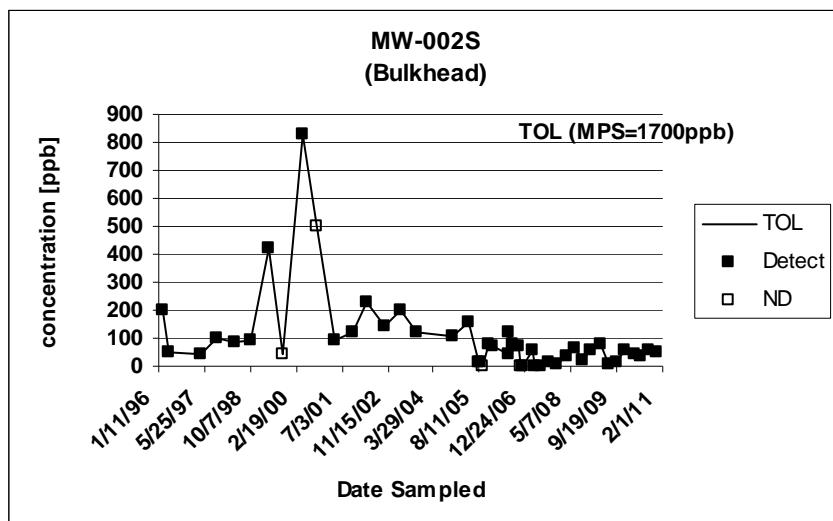
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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



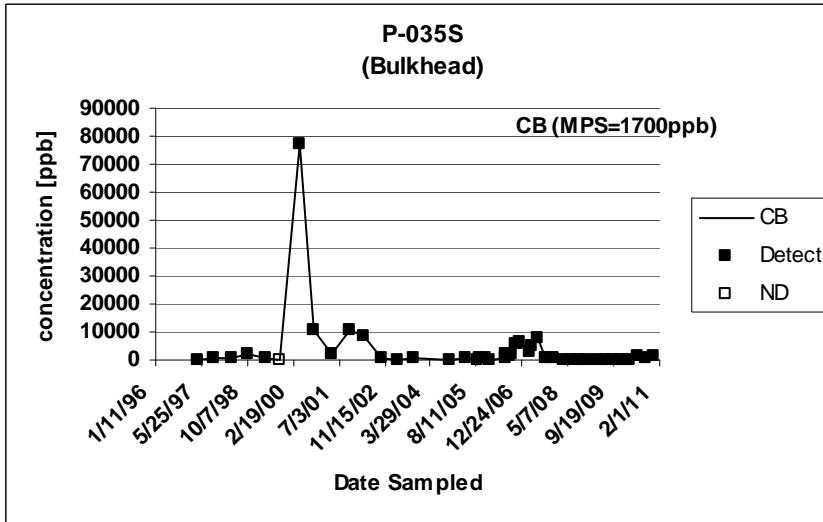
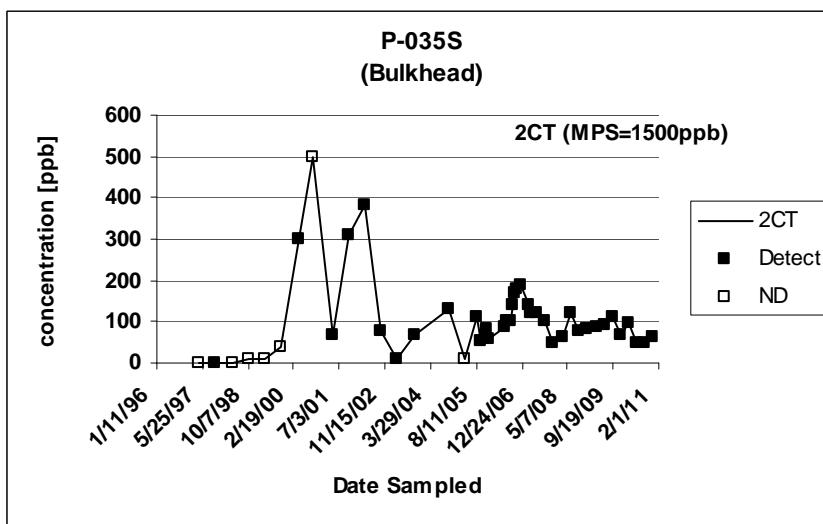
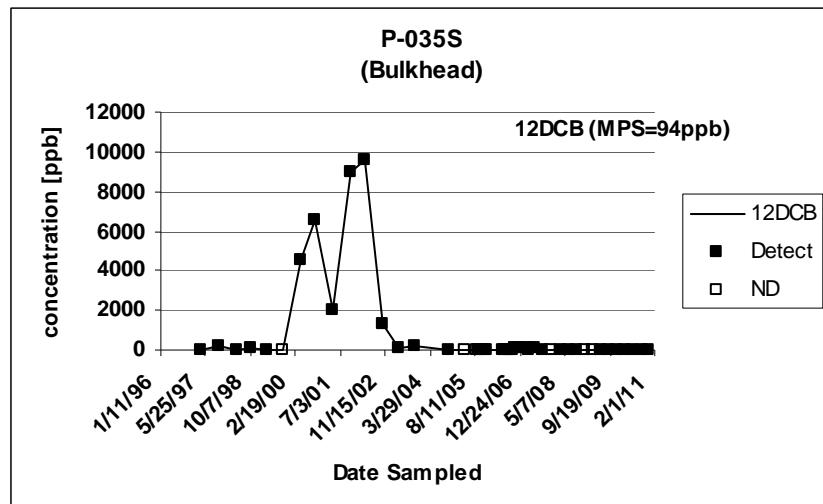
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**Time-Series Graph**  
**Annual Monitoring**



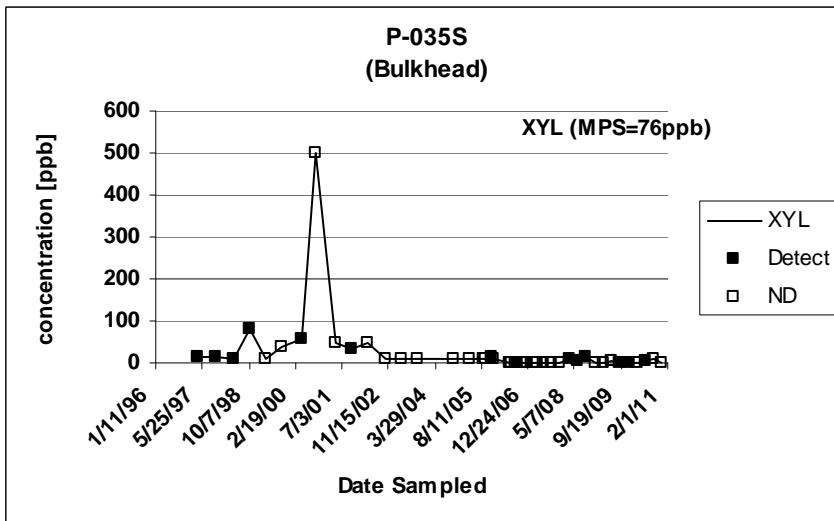
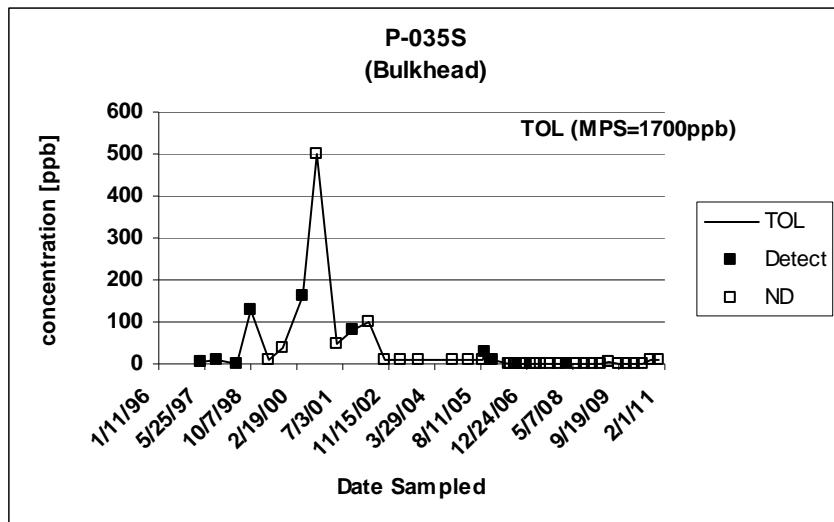
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Time-Series Graph  
Annual Monitoring



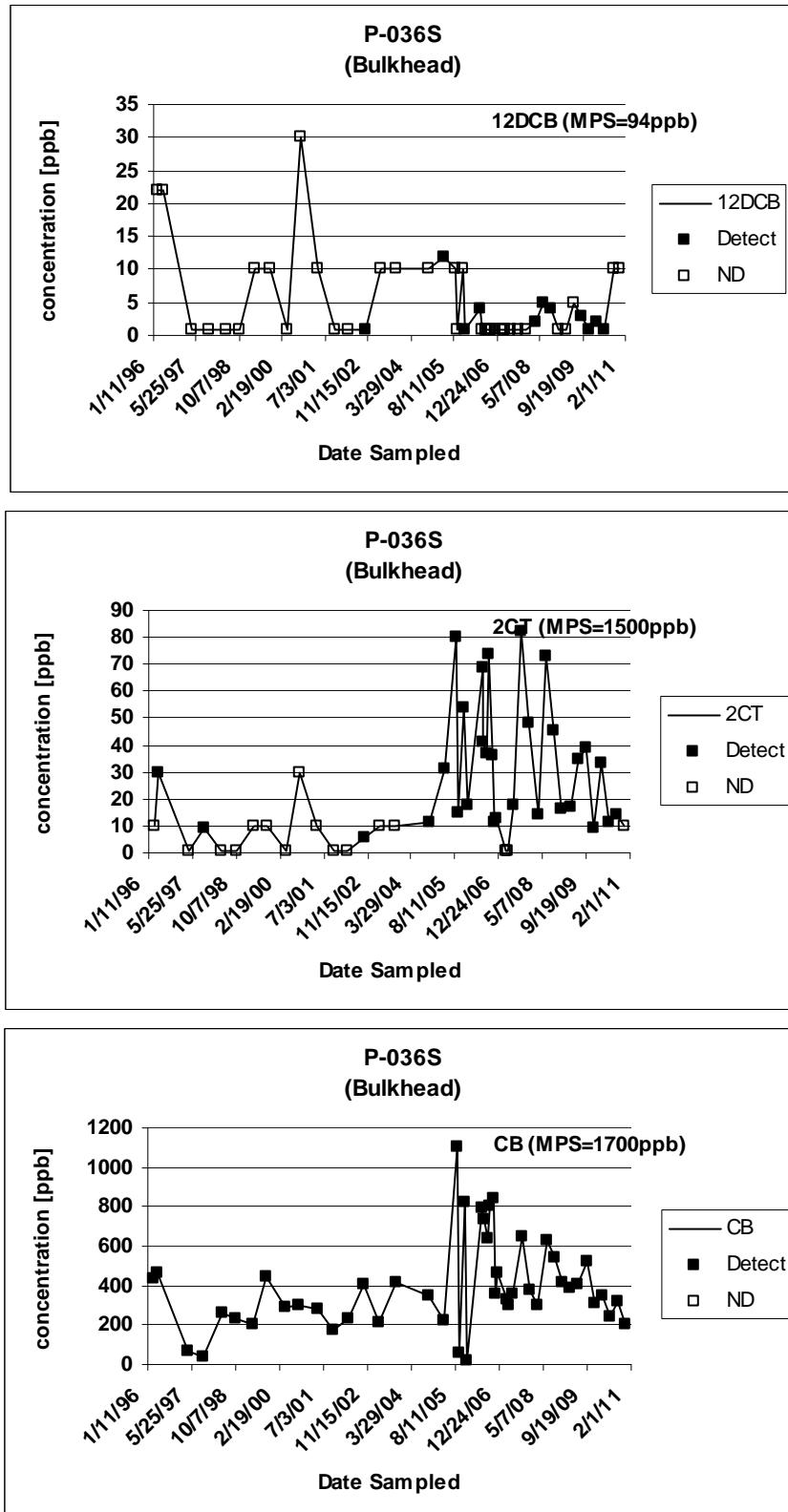
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**Time-Series Graph**  
**Annual Monitoring**



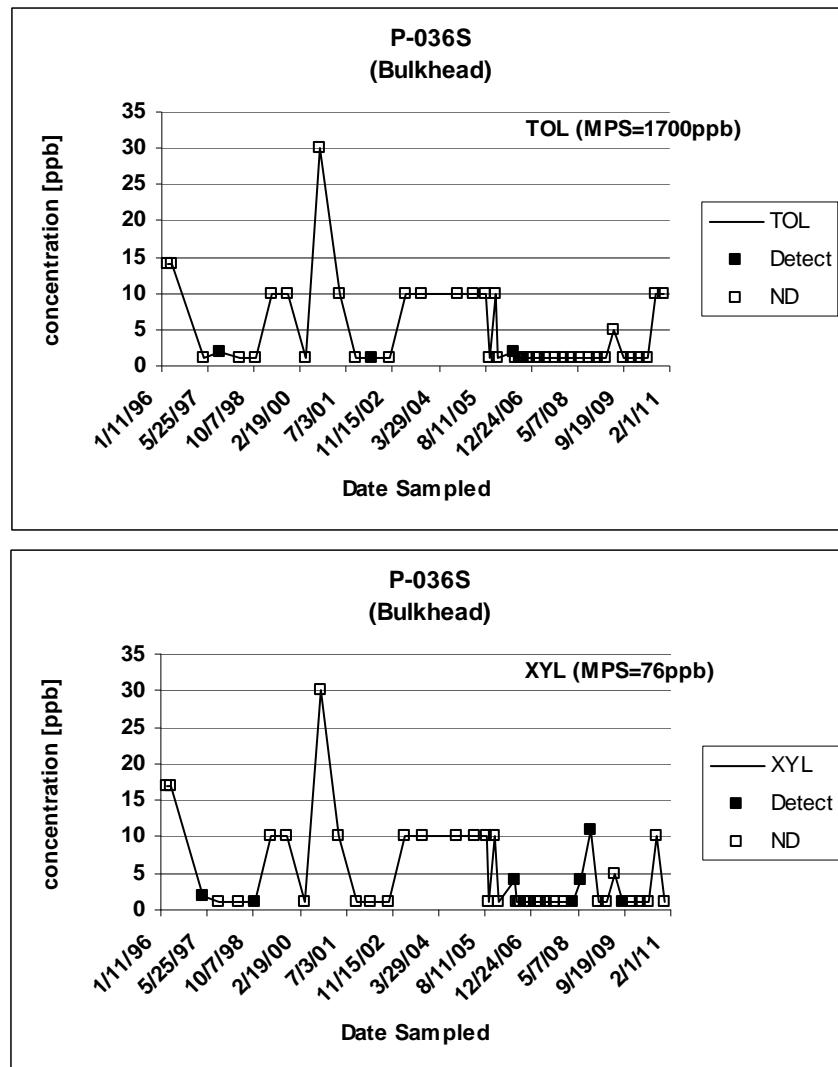
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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



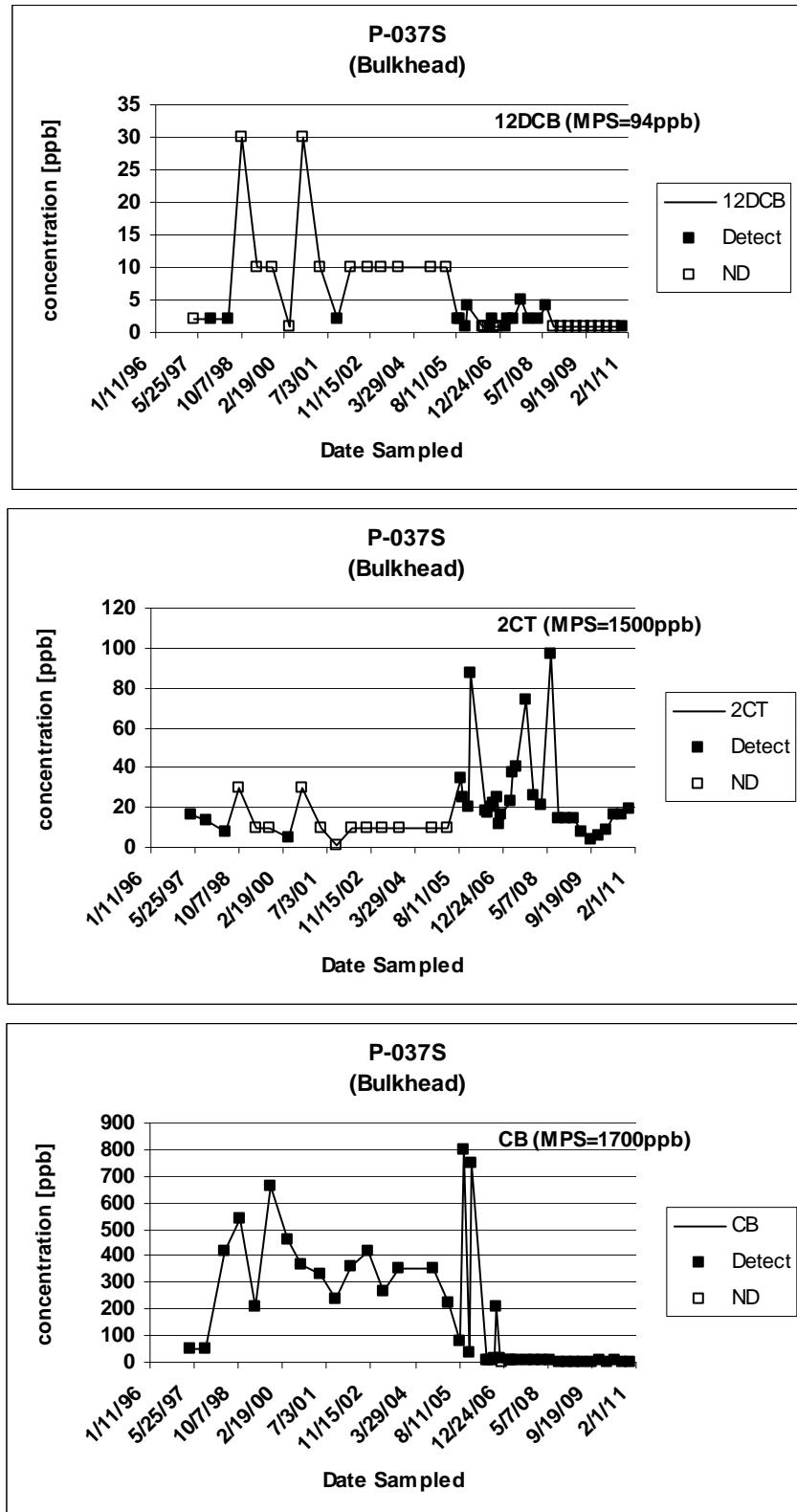
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**Time-Series Graph**  
**Annual Monitoring**



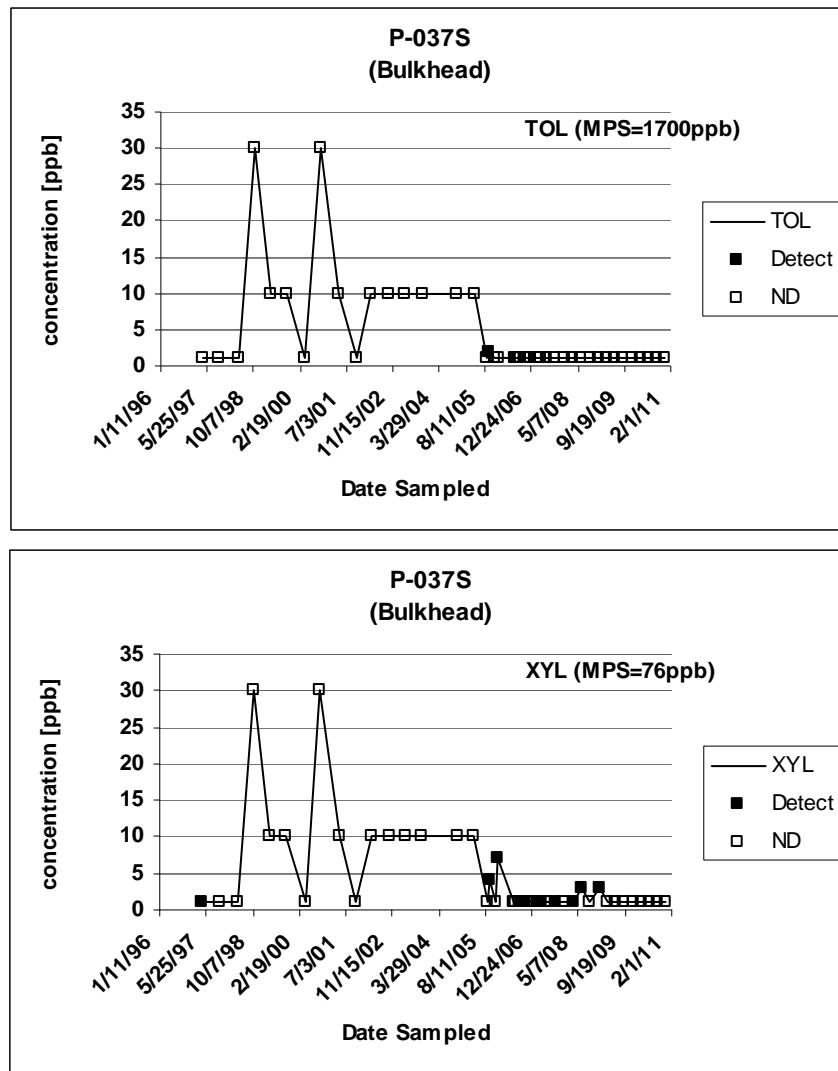
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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



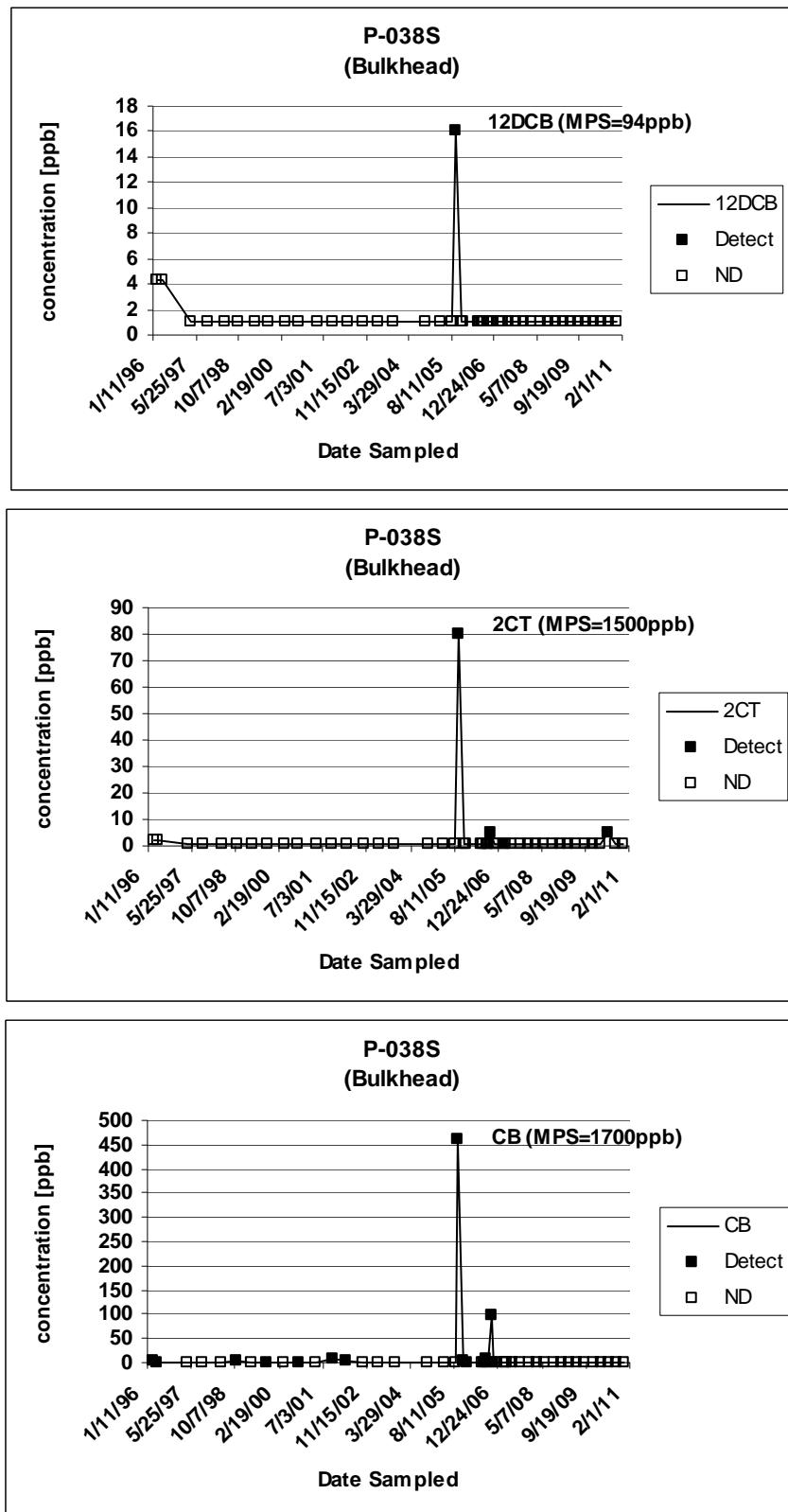
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**CRANSTON RHODE ISLAND FACILITY**  
**Time-Series Graph**  
**Annual Monitoring**



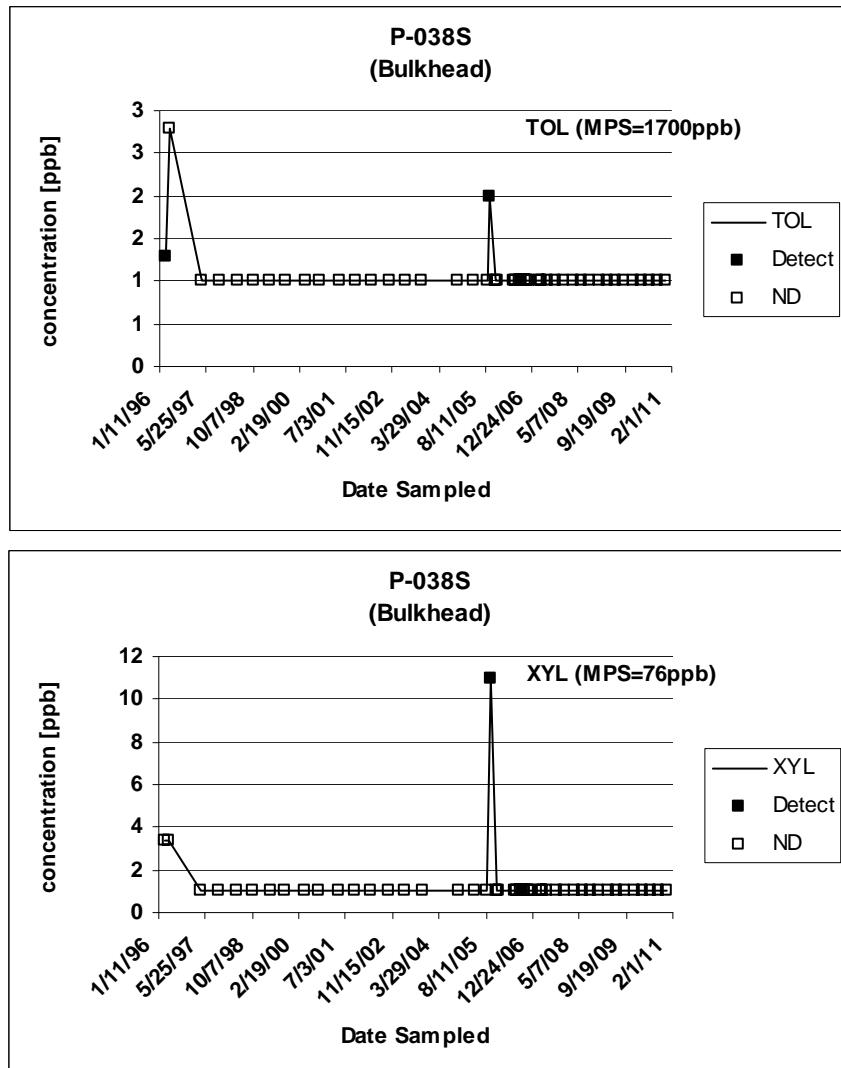
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Annual Monitoring



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Time-Series Graph  
Annual Monitoring



**APPENDIX D**

**TIME-SERIES GRAPHS**

**FOR**

**IN-RIVER WELLS**

**Table 5**  
**IN-RIVER WELLS**  
**Cumulative Results for Chemicals Of Concern**  
(Units in ppb)

Well No.	Date Sampled	1,2-Dichloro-benzene	Chloro-benzene	o-Chloro-toluene	Toluene	Xylenes
MPS		94	1700	1500	1700	76
SW-110	6-Mar-96	54	1600	55	460	34 U
SW-110	2-May-96	63 J	1600	40 U	220	68 U
SW-110	10-Apr-97	23	110	1	62	8
SW-110	8-Oct-97	1 U	1 U	1 U	1 U	1 U
SW-110	27-Apr-98	21	1100	2	170	6
SW-110	15-Oct-98	100 U	440	100 U	100 U	100 U
SW-110	15-Apr-99	50 U	670	50 U	50 U	50 U
SW-110	27-Sep-99	40 U	2500	40 U	220	40 U
SW-110	20-Apr-00	47	20 U	91	380	20 U
SW-110	21-Sep-00	100 U	2000	100 U	820	100 U
SW-110	18-Apr-01	1 U	3	1 U	1 U	1 U
SW-110	18-Oct-01	1 U	2	1 U	1 U	1 U
SW-110	4-Apr-02	1 U	2	1 U	1 U	1 U
SW-110	11-Oct-02	1 U	5	1 U	1 U	1 U
SW-110	2-Apr-03	1 U	1 U	1 U	1 U	1 U
SW-110	2-Oct-03	1 U	1	1 U	1 U	1 U
SW-110	16-Oct-04	1 U	1 U	1 U	1 U	1 U
SW-110	11-Apr-05	1 U	1 U	1 U	1 U	1 U
SW-110	14-Oct-08	NA	NA	NA	NA	NA
SW-110	11-Sep-09	NA	NA	NA	NA	NA
SW-110	10-Sep-10	NA	NA	NA	NA	NA
SW-120	5-Mar-96	4.3 U	63	2 U	2.8 U	3.4 U
SW-120	30-Apr-96	4.3 U	70	2 U	2.8 U	3.4 U
SW-120	8-Apr-97	1 U	43	1 U	1 U	1 U
SW-120	7-Oct-97	1	39	39	31	2
SW-120	27-Apr-98	1 U	54	1 U	1 U	1 U
SW-120	15-Oct-98	1 U	36	1 U	1 U	1 U
SW-120	15-Apr-99	10 U	92	10 U	10 U	10 U
SW-120	27-Sep-99	10 U	68	10 U	10 U	10 U
SW-120	20-Apr-00	1 U	67	1 U	1 U	1 U
SW-120	21-Sep-00	9100	1800	500 U	500 U	500 U
SW-120	18-Apr-01	1 U	58	1 U	1 U	1 U
SW-120	18-Oct-01	2	54	1 U	1 U	1 U
SW-120	5-Apr-02	1 U	39	1 U	1 U	1 U
SW-120	11-Oct-02	1 U	47	1 U	1 U	1 U
SW-120	2-Apr-03	1 U	45	1 U	1 U	1 U
SW-120	3-Oct-03	1 U	44	1 U	1 U	1 U
SW-120	17-Oct-04	1 U	48	1 U	1 U	1 U
SW-120	12-Apr-05	1 U	40	1 U	1 U	1 U
SW-120	14-Oct-08	1 U	43	1 U	1 U	1 U
SW-120	11-Sep-09	NA	NA	NA	NA	NA
SW-120	10-Sep-10	NA	NA	NA	NA	NA
SW-130	6-Mar-96	4.3 U	3 U	6.5	2.8 U	3.4 U
SW-130	1-May-96	4.3 U	3 U	12	2.8 U	3.4 U
SW-130	9-Apr-97	1 U	1	12	1 U	1 U
SW-130	7-Oct-97	1 U	1 U	2	1 U	1 U
SW-130	27-Apr-98	1 U	27	14	1 U	1 U
SW-130	15-Oct-98	1 U	1 U	1	1 U	1 U
SW-130	15-Apr-99	1 U	5	5	1 U	1 U
SW-130	27-Sep-99	1 U	1	2	1 U	1 U
SW-130	20-Apr-00	1	10	30	1 U	1
SW-130	21-Sep-00	5 U	5 U	5 U	5 U	5 U
SW-130	19-Apr-01	1 U	1 U	1 U	1 U	1 U
SW-130	18-Oct-01	1 U	12	1 U	1 U	1 U
SW-130	4-Apr-02	1 U	1 U	1 U	1 U	1 U
SW-130	11-Oct-02	1 U	1 U	1 U	1 U	1 U
SW-130	2-Apr-03	NA	NA	NA	NA	NA
SW-130	3-Oct-03	NA	NA	NA	NA	NA
SW-130	17-Oct-04	NA	NA	NA	NA	NA
SW-130	12-Apr-05	NA	NA	NA	NA	NA
SW-130	14-Oct-08	NA	NA	NA	NA	NA
SW-130	11-Sep-09	NA	NA	NA	NA	NA
SW-130	10-Sep-10	NA	NA	NA	NA	NA

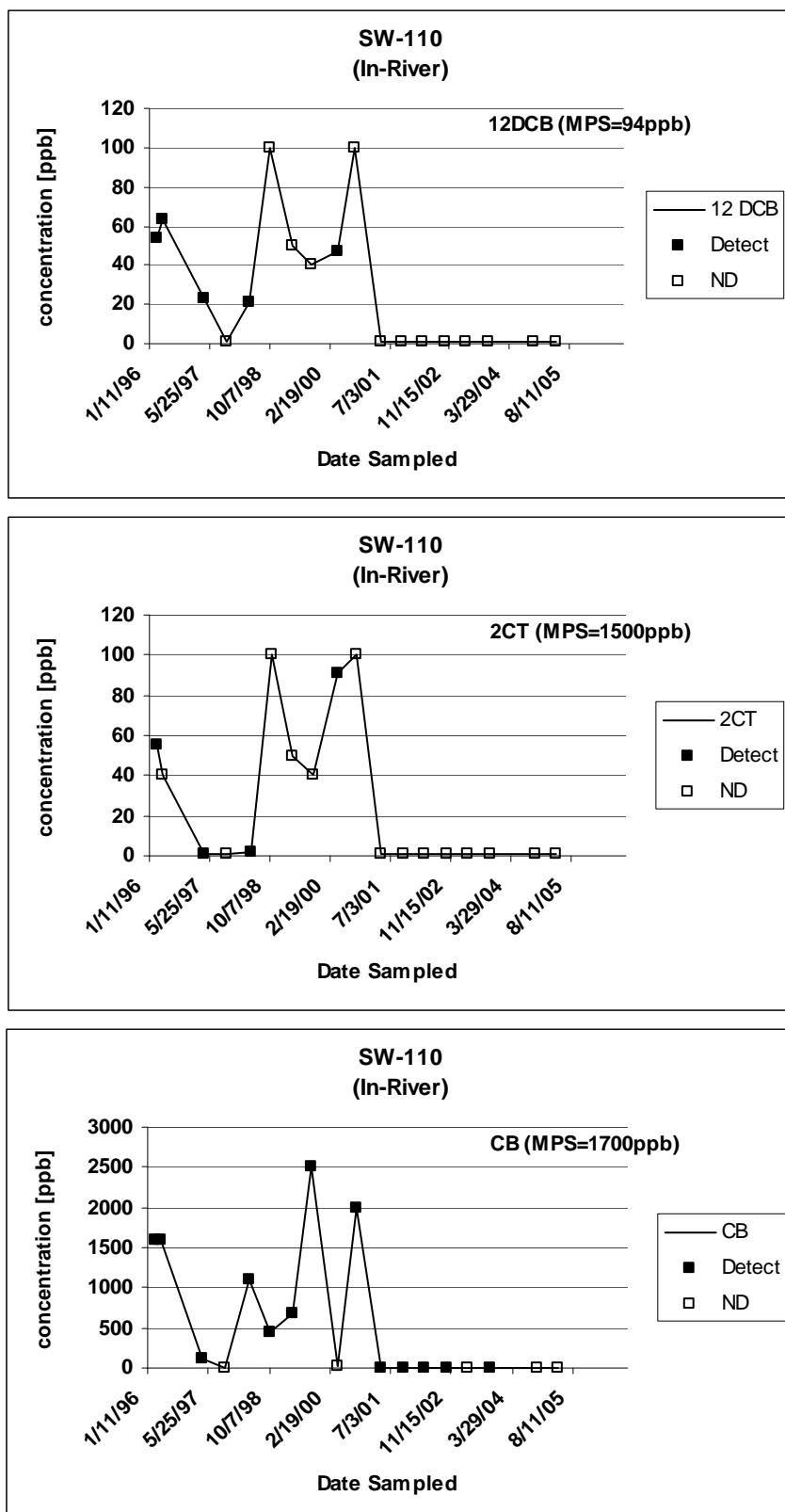
MPS = Media Protection Standard

U = Nondetect with detection limit given

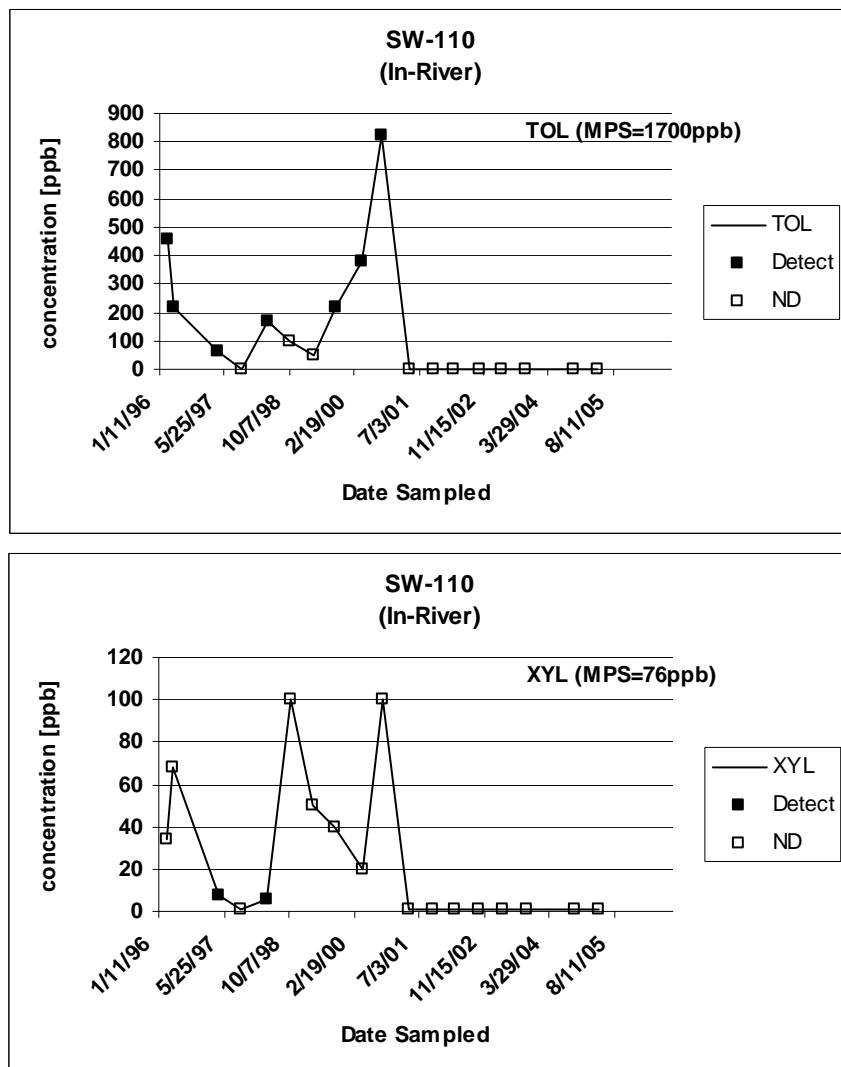
J = Estimated value

NA - Not available, dropped from the program because they were no longer able to provide a sample due to blockage.

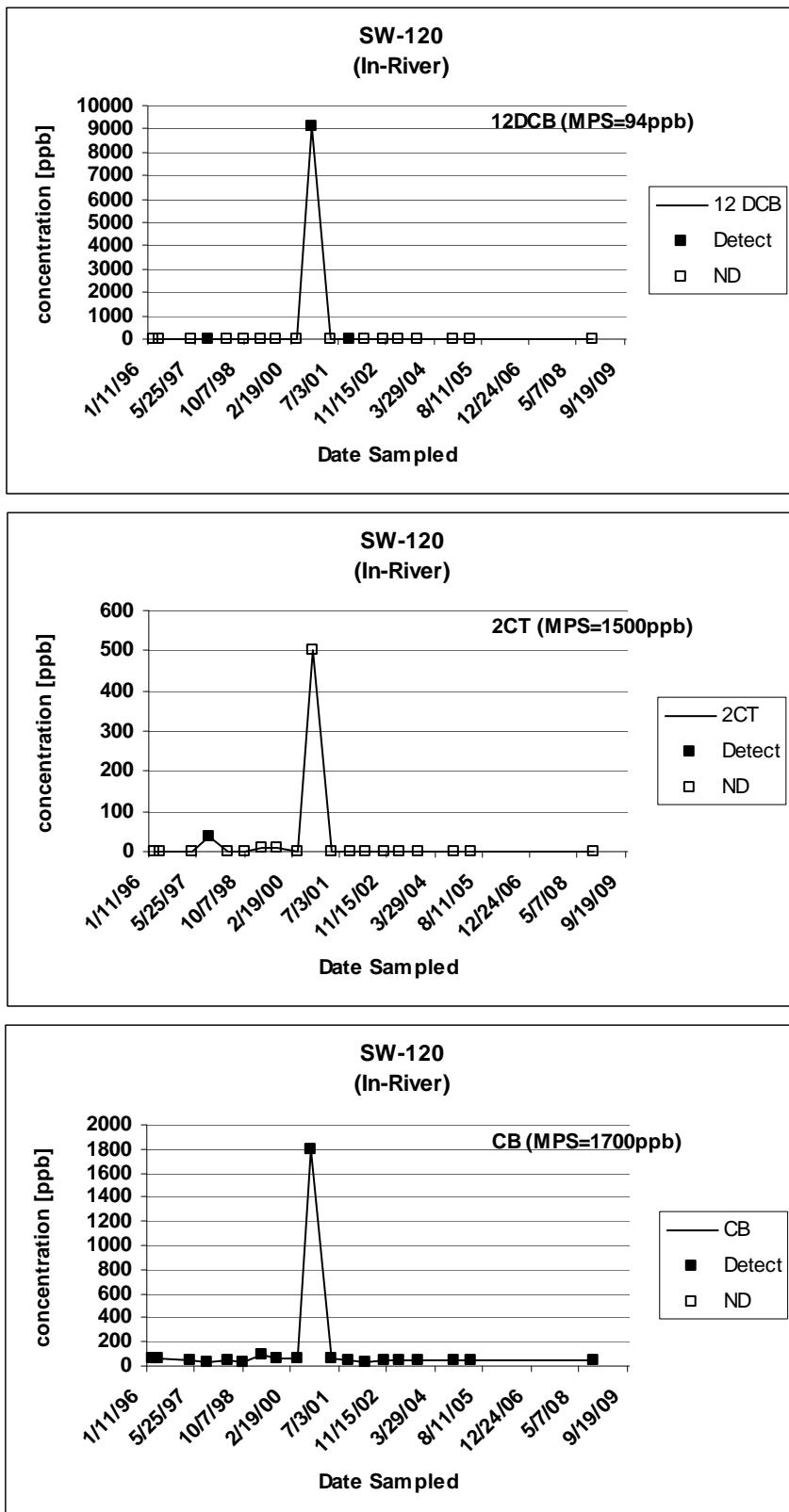
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**CRANSTON RHODE ISLAND FACILITY**  
**Time-Series Graph**  
**Annual Monitoring**



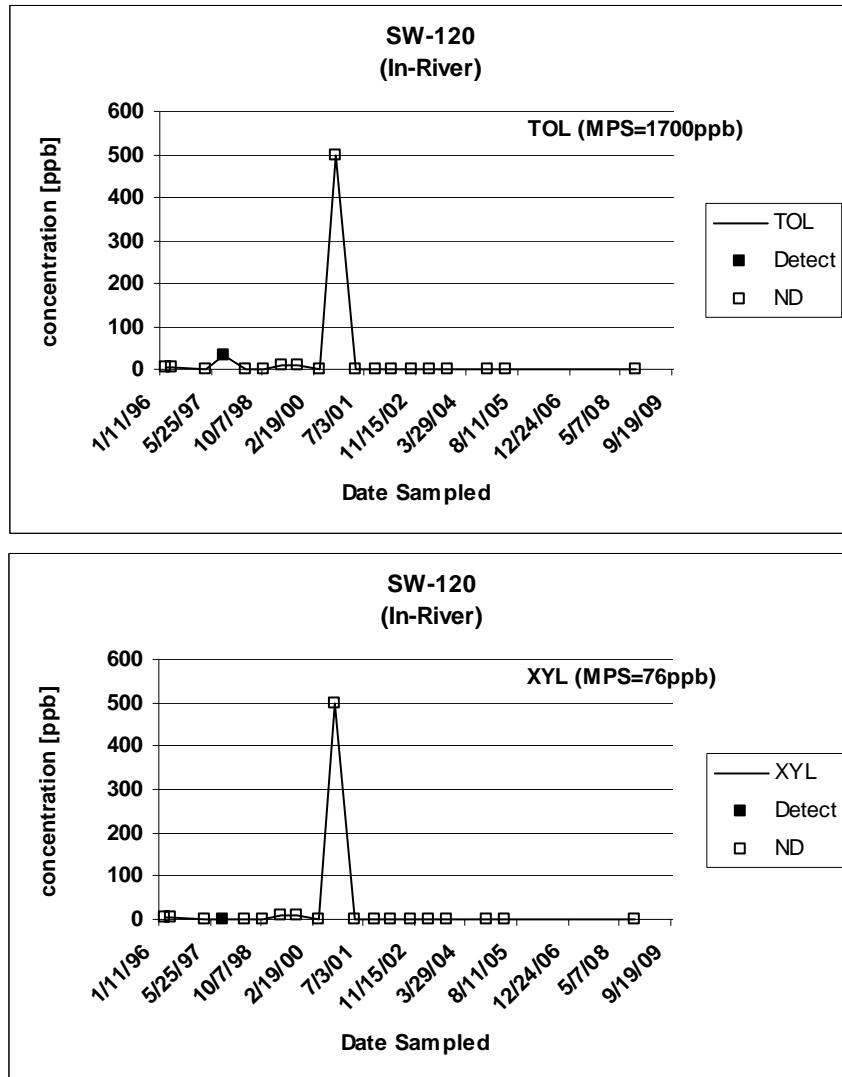
BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



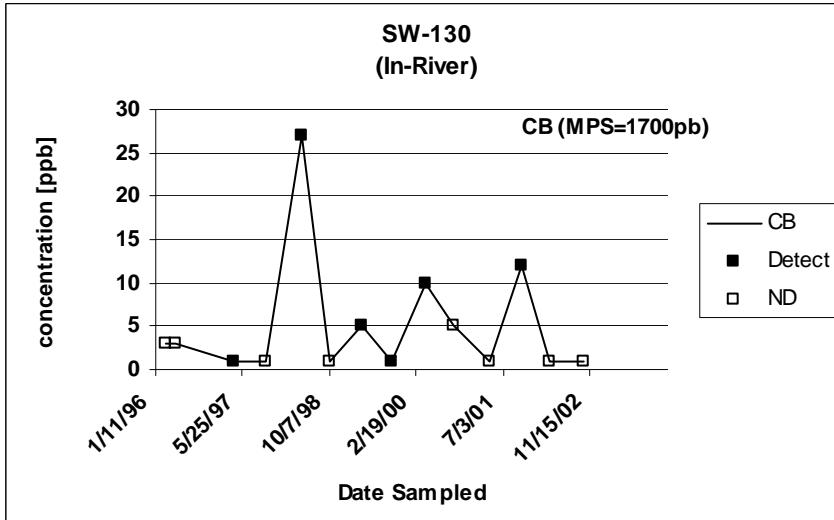
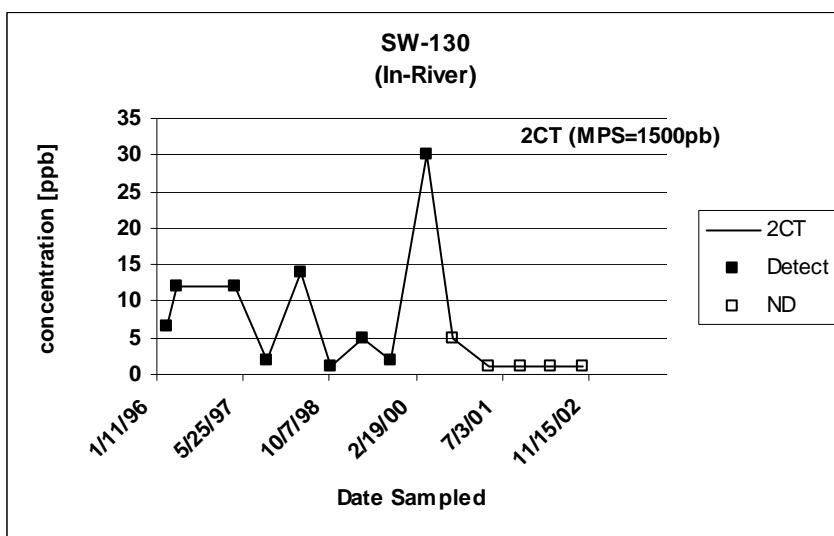
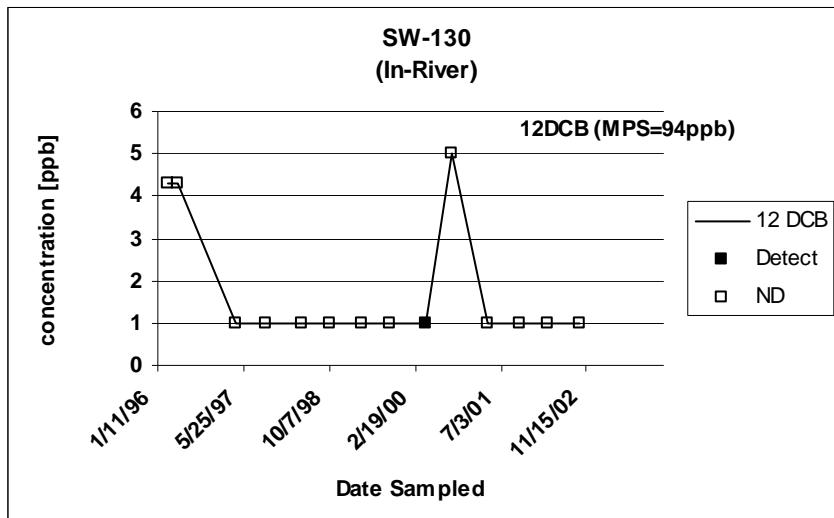
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CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



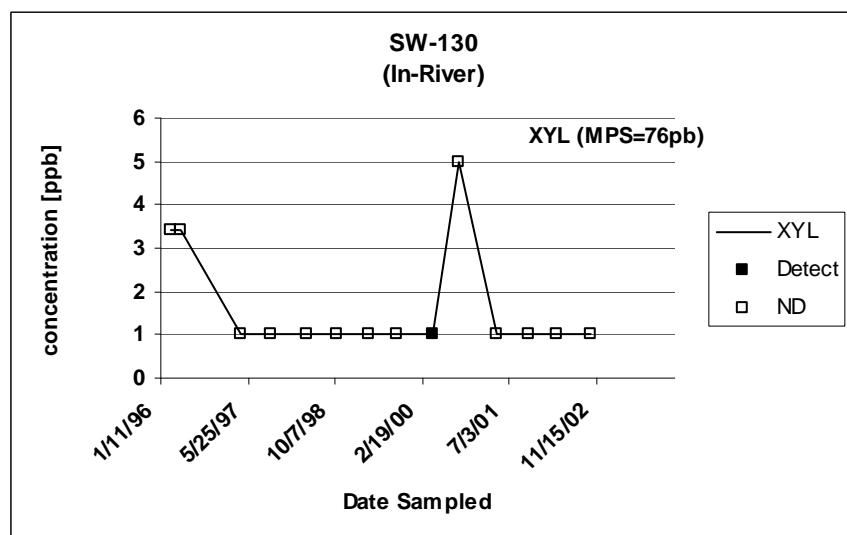
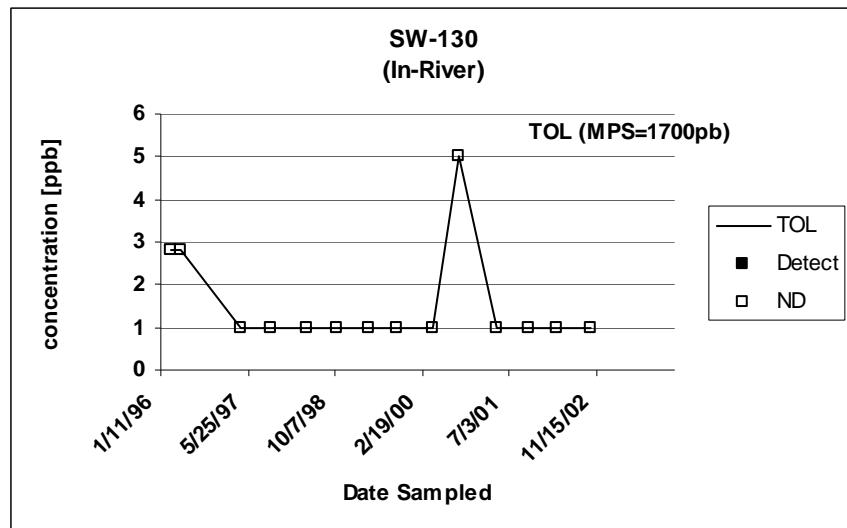
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Annual Monitoring



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Time-Series Graph  
Annual Monitoring



BASF CORPORATION  
CRANSTON RHODE ISLAND FACILITY  
Time-Series Graph  
Annual Monitoring



**APPENDIX E**

**CERTIFICATE OF ANALYSIS**

**R. I. ANALYTICAL**

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 3/3/10  
Date Reported: 3/9/10  
Date Revised: 4/13/10  
P.O. #: TO 002129  
Work Order # 1003-03750

---

**DESCRIPTION:** 180 MILL STREET, CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact  
our customer service department.

Approved by:



Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 001

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: 5-GRAB/COMPOSITE

SAMPLE DATE/TIME: 3/02/2010 - 3/03/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Total Cyanide	<0.01	0.01	mg/l	SM-4500CN-C E	3/5/10	ML
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Bromomethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Vinyl Chloride	4	1	ug/l	EPA 624	3/3/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Chloroethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Methylene Chloride	<5	5	ug/l	EPA 624	3/3/10	MMM
Trichlorofluoromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1-Dichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
Chloroform	<1	1	ug/l	EPA 624	3/3/10	MMM
1,2-Dichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Carbon Tetrachloride	<1	1	ug/l	EPA 624	3/3/10	MMM
Bromodichloromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,2-Dichloropropane	<1	1	ug/l	EPA 624	3/3/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	EPA 624	3/3/10	MMM
Trichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Dibromochloromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Bromoform	<1	1	ug/l	EPA 624	3/3/10	MMM
Tetrachloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Chlorobenzene	5	1	ug/l	EPA 624	3/3/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	EPA 624	3/3/10	MMM
Dichlorobenzenes	4.0	1	ug/l	EPA 624	3/3/10	MMM
Benzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Toluene	<1	1	ug/l	EPA 624	3/3/10	MMM
Ethylbenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Xylenes	<1	1	ug/l	EPA 624	3/3/10	MMM
Acetone	<10	10	ug/l	EPA 624	3/3/10	MMM
Carbon Disulfide	<5	5	ug/l	EPA 624	3/3/10	MMM
2-Butanone	<10	10	ug/l	EPA 624	3/3/10	MMM
Vinyl Acetate	<50	50	ug/l	EPA 624	3/3/10	MMM
4-methyl-2-pentanone(MIBK)	<10	10	ug/l	EPA 624	3/3/10	MMM
2-Hexanone	<10	10	ug/l	EPA 624	3/3/10	MMM
Styrene	<1	1	ug/l	EPA 624	3/3/10	MMM
o-Chlorotoluene	<1	1	ug/l	EPA 624	3/3/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/3/10  
 Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 001

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: 5-GRAB/COMPOSITE

SAMPLE DATE/TIME: 3/02/2010 - 3/03/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,2-Dichlorobenzene	4	1	ug/l	EPA 624	3/3/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Surrogates			RANGE	EPA 624	3/3/10	MMM
Dibromofluoromethane	96		86-118%	EPA 624	3/3/10	MMM
4-Bromofluorobenzene	93		86-115%	EPA 624	3/3/10	MMM
Toluene-D8	99		88-110%	EPA 624	3/3/10	MMM
Semi-Volatile Organic Compounds						
Acenaphthene	<5	5	ug/l	EPA 625	3/5/10	CBM
Acenaphthylene	<5	5	ug/l	EPA 625	3/5/10	CBM
Anthracene	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzidine	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzo(a)anthracene	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzo(b)fluoranthene	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzo(k)fluoranthene	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzo(g,h,i)perylene	<5	5	ug/l	EPA 625	3/5/10	CBM
Benzo(a)pyrene	<5	5	ug/l	EPA 625	3/5/10	CBM
bis(2-Chloroethyl)Ether	<5	5	ug/l	EPA 625	3/5/10	CBM
Bis(2-Chloroethoxy)methane	<5	5	ug/l	EPA 625	3/5/10	CBM
Bis(2-chloroisopropyl)ether	<5	5	ug/l	EPA 625	3/5/10	CBM
Bis(2-ethylhexyl)phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
4-Bromophenyl phenyl ether	<5	5	ug/l	EPA 625	3/5/10	CBM
Butylbenzyl phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
2-Chloronaphthalene	<5	5	ug/l	EPA 625	3/5/10	CBM
4-Chlorophenyl phenyl ether	<5	5	ug/l	EPA 625	3/5/10	CBM
Chrysene	<5	5	ug/l	EPA 625	3/5/10	CBM
Dibenzo(a,h)anthracene	<5	5	ug/l	EPA 625	3/5/10	CBM
Di-n-butyl phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
1,2-Dichlorobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM
1,3-Dichlorobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM
1,4-Dichlorobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM
3,3'-Dichlorobenzidine	<5	5	ug/l	EPA 625	3/5/10	CBM
Diethyl phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
Dimethyl phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
2,4-Dinitrotoluene	<5	5	ug/l	EPA 625	3/5/10	CBM
2,6-Dinitrotoluene	<5	5	ug/l	EPA 625	3/5/10	CBM
Di-n-octyl phthalate	<5	5	ug/l	EPA 625	3/5/10	CBM
1,2-Diphenylhydrazine	<5	5	ug/l	EPA 625	3/5/10	CBM
Fluoranthene	<5	5	ug/l	EPA 625	3/5/10	CBM
Fluorene	<5	5	ug/l	EPA 625	3/5/10	CBM
Hexachlorobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 001

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: 5-GRAB/COMPOSITE

SAMPLE DATE/TIME: 3/02/2010 - 3/03/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Hexachlorobutadiene	<5	5	ug/l	EPA 625	3/5/10	CBM
Hexachlorocyclopentadiene	<5	5	ug/l	EPA 625	3/5/10	CBM
Hexachloroethane	<5	5	ug/l	EPA 625	3/5/10	CBM
Indeno(1,2,3-cd)pyrene	<5	5	ug/l	EPA 625	3/5/10	CBM
Isophorone	<5	5	ug/l	EPA 625	3/5/10	CBM
Naphthalene	<5	5	ug/l	EPA 625	3/5/10	CBM
Nitrobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM
N-nitrosodimethylamine	<5	5	ug/l	EPA 625	3/5/10	CBM
N-nitrosodiphenylamine	<5	5	ug/l	EPA 625	3/5/10	CBM
N-nitrosodi-n-propylamine	<5	5	ug/l	EPA 625	3/5/10	CBM
Phenanthrene	<5	5	ug/l	EPA 625	3/5/10	CBM
Pyrene	<5	5	ug/l	EPA 625	3/5/10	CBM
1,2,4-Trichlorobenzene	<5	5	ug/l	EPA 625	3/5/10	CBM
4-Chloro-3-methylphenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2-Chlorophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2,4-Dichlorophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2,4-Dimethylphenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2-Methyl-4,6-dinitrophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2,4-Dinitrophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2-Nitrophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
4-Nitrophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
Pentachlorophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
Phenol	<5	5	ug/l	EPA 625	3/5/10	CBM
2,4,6-Trichlorophenol	<5	5	ug/l	EPA 625	3/5/10	CBM
Surrogates		RANGE		EPA 625	3/5/10	CBM
Phenol-d5	33	15-110%		EPA 625	3/5/10	CBM
2-Fluorophenol	34	15-110%		EPA 625	3/5/10	CBM
2,4,6-Tribromophenol	80	15-110%		EPA 625	3/5/10	CBM
Nitrobenzene-d5	62	30-130%		EPA 625	3/5/10	CBM
2-Fluorobiphenyl	60	30-130%		EPA 625	3/5/10	CBM
P-Terphenyl-d14	69	30-130%		EPA 625	3/5/10	CBM

Volatile organic analyses performed under the operating guidelines  
method 8260.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 002

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: COMPOSITE

SAMPLE DATE/TIME: 3/02/2010 - 3/03/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Total Metals						
Cadmium	<0.004	0.004	mg/l	EPA 200.7	3/5/10	PJC
Chromium	<0.005	0.005	mg/l	EPA 200.7	3/5/10	PJC
Copper	<0.010	0.010	mg/l	EPA 200.7	3/5/10	PJC
Lead	<0.040	0.040	mg/l	EPA 200.7	3/5/10	PJC
Nickel	<0.010	0.010	mg/l	EPA 200.7	3/5/10	PJC
Silver	<0.020	0.020	mg/l	EPA 200.7	3/5/10	PJC
Zinc	<0.020	0.020	mg/l	EPA 200.7	3/5/10	PJC

Sample # 003

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 06:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	51		F	EPA 170.1	3/2/10	ATP

Sample # 004

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 07:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.5		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	51		F	EPA 170.1	3/2/10	ATP

Sample # 005

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 08:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	53		F	EPA 170.1	3/2/10	ATP

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 006

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 09:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	53		F	EPA 170.1	3/2/10	ATP

Sample # 007

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 10:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	54		F	EPA 170.1	3/2/10	ATP

Sample # 008

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	ATP
Temperature (field)	54		F	EPA 170.1	3/2/10	ATP

Sample # 009

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	JRS
Temperature (field)	54		F	EPA 170.1	3/2/10	JRS

Sample # 010

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 13:00

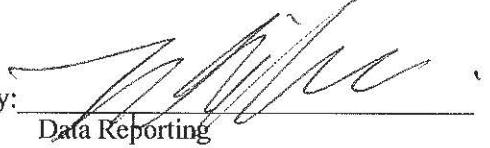
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/2/10	JRS
Temperature (field)	52		F	EPA 170.1	3/2/10	JRS

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/3/10  
 Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 011

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 14:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 012

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 15:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 013

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 16:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 014

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 17:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 015

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 18:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 016

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 19:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 017

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 20:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/2/10	JRS
Temperature (field)	53		F	EPA 170.1	3/2/10	JRS

Sample # 018

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 21:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/2/10	JRS
Temperature (field)	54		C	EPA 170.1	3/2/10	JRS

Sample # 019

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 22:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/2/10	DRS
Temperature (field)	54		F	EPA 170.1	3/2/10	DRS

Sample # 020

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010 @ 23:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/2/10	DRS
Temperature (field)	54		F	EPA 170.1	3/2/10	DRS

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 021

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/3/10	DRS
Temperature (field)	53		F	EPA 170.1	3/3/10	DRS

Sample # 022

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 01:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/3/10	DRS
Temperature (field)	54		F	EPA 170.1	3/3/10	DRS

Sample # 023

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 02:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/2/10	DRS
Temperature (field)	54		F	EPA 170.1	3/3/10	DRS

Sample # 024

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 03:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/3/10	DRS
Temperature (field)	54		F	EPA 170.1	3/3/10	DRS

Sample # 025

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 04:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+B	3/3/10	DRS
Temperature (field)	54		F	EPA 170.1	3/3/10	DRS

## R.I. Analytical Laboratories, Inc.

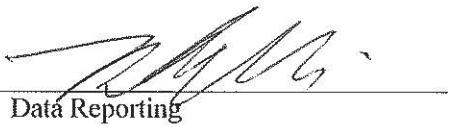
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:


  
Data Reporting

Sample # 026

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 05:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	3/3/10	DRS
Temperature (field)	54		F	EPA 170.1	3/3/10	DRS

Sample # 027

SAMPLE DESCRIPTION: LOCATION #1

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/03/2010 @ 06:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.2		SU	SM 4500-H+ B	3/3/10	RG
Temperature (field)	52		F	EPA 170.1	3/3/10	RG

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 028

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Bromomethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Vinyl Chloride	<1	1	ug/l	EPA 624	3/3/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Chloroethane	<10	10	ug/l	EPA 624	3/3/10	MMM
Methylene Chloride	<5	5	ug/l	EPA 624	3/3/10	MMM
Trichlorofluoromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1-Dichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
Chloroform	<1	1	ug/l	EPA 624	3/3/10	MMM
1,2-Dichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Carbon Tetrachloride	<1	1	ug/l	EPA 624	3/3/10	MMM
Bromodichloromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
1,2-Dichloropropane	<1	1	ug/l	EPA 624	3/3/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	EPA 624	3/3/10	MMM
Trichloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Dibromochloromethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Bromoform	<1	1	ug/l	EPA 624	3/3/10	MMM
Tetrachloroethylene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	EPA 624	3/3/10	MMM
Chlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	EPA 624	3/3/10	MMM
Dichlorobenzenes	<1	1	ug/l	EPA 624	3/3/10	MMM
Benzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Toluene	<1	1	ug/l	EPA 624	3/3/10	MMM
Ethylbenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Xylenes	<1	1	ug/l	EPA 624	3/3/10	MMM
Acetone	<10	10	ug/l	EPA 624	3/3/10	MMM
Carbon Disulfide	<5	5	ug/l	EPA 624	3/3/10	MMM
2-Butanone	<10	10	ug/l	EPA 624	3/3/10	MMM
Vinyl Acetate	<50	50	ug/l	EPA 624	3/3/10	MMM
4-methyl-2-pentanone(MIBK)	<10	10	ug/l	EPA 624	3/3/10	MMM
2-Hexanone	<10	10	ug/l	EPA 624	3/3/10	MMM
Styrene	<1	1	ug/l	EPA 624	3/3/10	MMM
o-Chlorotoluene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/3/10

Work Order #: 1003-03750

Approved by:

  
Data Reporting

Sample # 028

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,3-Dichlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	EPA 624	3/3/10	MMM
Surrogates			RANGE	EPA 624	3/3/10	MMM
Dibromofluoromethane	95		86-118%	EPA 624	3/3/10	MMM
4-Bromofluorobenzene	95		86-115%	EPA 624	3/3/10	MMM
Toluene-D8	99		88-110%	EPA 624	3/3/10	MMM

Volatile organic analyses performed under the operating guidelines  
method 8260.

Sample # 029

SAMPLE DESCRIPTION: TEMP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/02/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Temperature upon receipt	5.2		degrees C	EPA 170.1	3/3/10	MCM



April 13, 2010

Ciba Specialty Chemicals Corp.  
Attention: Ms. Doreen McNichols  
P.O. Box 71  
Building 216  
Tom River, NJ 08754

Dear Ms. McNichols,

In response to your request through our Customer Service Department, a Client Service Request (CSR) was initiated for R.I. Analytical Laboratories, Inc. (RIAL) Work Order # 1003-03750. The Work Order was submitted to the laboratory under the Project Name: 180 Mill Street, Cranston, RI. The sample in question was labeled Location #1 grab 03/03/2010 @04:00 (RIAL Lab #1003-03750-025). A data review was requested as pH reported on the Certificate of Analysis does not match the field data for this location. The CSR included a review of the raw data and reporting forms.

As a result of this review, it was found that the pH was incorrectly entered into the Laboratory Information Management System from the field data.

A revised Certificate of Analysis reflecting the correct pH result has been completed and is attached for your convenience.

If you have any further questions please contact Kristen Mayo at (401) 737-8500 ext. 109 or [kmayo@rianalytical.com](mailto:kmayo@rianalytical.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael J. Hobin".

Michael J. Hobin  
QA/QC Manager

**R.I. Analytical Laboratories, Inc.**

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

**CHAIN OF CUSTODY RECORD**Page 1 of 1

**Container Type Codes:**  
P = Plastic      V = Vial  
G = Glass      St = Sterile  
AG = Amber Glass  
O = Other (describe)

**Preservative Codes:**  
NP = Non preserved      S = Sulfuric  
I = Cooled 4°C      H = HCl  
N = Nitric      SH = NaOH  
M = Methanol      SB = NaHSO<sub>4</sub>

**Matrix Codes:**  
GW = Groundwater      S = Soil  
WW = Wastewater      SI = Sludge  
DW = Potable Water      A = Air  
O = Other (describe)      B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
3/2/10 ~ - 3/3/10	6:00, 12:00, 18:00, 00:00, 06:00	Location #1	5G/C	5P	SH	WW	Total Cyanide
			"	10V	HCL	"	624*
			"	5-AG	NP	"	625*
	6:00 ~ - 6:05		C	1P	N	"	Total Cd, Cr, Cu, Pb, Ni, Ag, Zn
			G	-	-	"	Field analyzed pH (results attached)
			"	"	"	"	Field analyzed Temperature (results attached)
3/2/10	Trip Blank		"	1V	HCL	DI	624
↓	Temperature Blank		"	1V	NP	DI	Temperature =

## Client Information

## Project Information

Company Name: Ciba Geigy	Project Name / Location: 180 Mill Street in Cranston, RI		
Address: Rt 37 West, PO BOX 71	P.O. Number:	Project Number:	
City / State / Zip: Tom River, NJ 08754-0071	Report To:	Phone:	Fax:
Phone: (732) 914-2517	Fax: (732) 914-2909	Sampled by: A.P., J.S., D.S., R.G.	
Contact: Ms. Doreen McNicholas	Reference Proposal:		

Relinquished by:	Date	Time	Received by:	Date	Time
Ryan H	3/2/10	0720	Jichael Wheeler	3/3/10	720

Turn Around Time:
<input type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply
<input type="checkbox"/> Rush (business days)

## Project Comments:

Grab Times: 6:00  
12:00  
18:00  
00:00  
06:00

Meter Readings Start: 41833500  
 Meter Readings End: 41855800

\*Composite Samples 5.2

## RIAL USE ONLY:

<input type="checkbox"/> Pick-Up Only
<input checked="" type="checkbox"/> RIAL Sampled. Attach field hours
<input checked="" type="checkbox"/> Shipped on ice
RIAL W.O. # <u>1023-03750</u>

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 3/12/10  
Date Reported: 3/17/10  
P.O. #: TO 002129  
Work Order #: 1003-04469

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

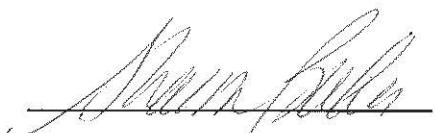
Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:



Data Reporting

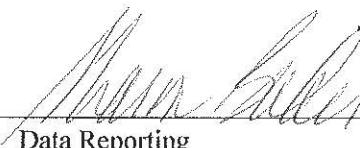
enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 001

## SAMPLE DESCRIPTION: MW-1S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 9:30

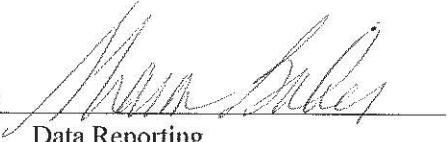
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	9.5		SU	SM 4500-H+ B	3/12/10	ATP
Temperature (field)	49.6		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	587	1	µMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	5.12	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	890	10	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	6	1	ug/l	8260	3/16/10	MMM
Toluene	2	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	16	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	5	1	ug/l	8260	3/16/10	MMM
o-Xylene	6	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 001

SAMPLE DESCRIPTION: MW-1S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 9:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	97		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	88		86-115%	8260	3/16/10	MMM
Toluene-D8	101		88-110%	8260	3/16/10	MMM

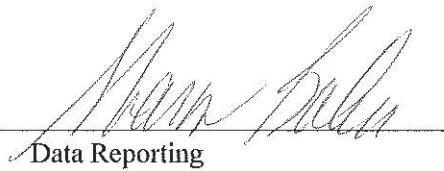
## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

Data Reporting



Sample #: 002

**SAMPLE DESCRIPTION:** P-38S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 3/12/2010 @ 9:10

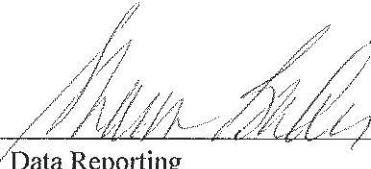
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/12/10	ATP
Temperature (field)	52.6		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	113	1	µMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	6.62	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	<1	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	<1	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 002

**SAMPLE DESCRIPTION:** P-38S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 3/12/2010 @ 9:10

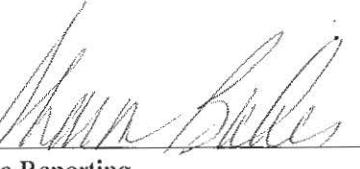
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	101		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	100		86-115%	8260	3/16/10	MMM
Toluene-D8	103		88-110%	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
John Belles

Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: P-37S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+B	3/12/10	ATP
Temperature (field)	49.0		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	129	1	µMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	4.36	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	3	1	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	<1	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	<1	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: P-37S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	9	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	99		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	100		86-115%	8260	3/16/10	MMM
Toluene-D8	101		88-110%	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: P-36S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 11:17

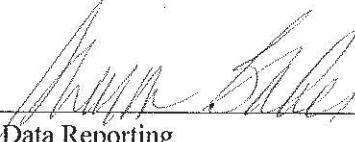
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.0		SU	SM 4500-H+B	3/12/10	ATP
Temperature (field)	49.4		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	127	1	µMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	4.11	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	350	10	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	21	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	2	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: P-36S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 11:17

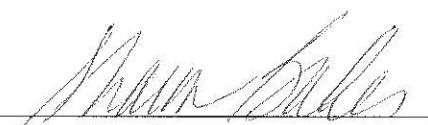
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	33	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	2	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	97		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	93		86-115%	8260	3/16/10	MMM
Toluene-D8	102		88-110%	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:


  
John Miller  
 Data Reporting

Sample #: 005

**SAMPLE DESCRIPTION:** P-35S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 3/12/2010 @ 11:48

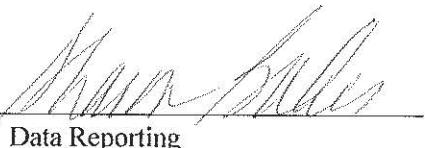
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	SM 4500-H+ B	3/12/10	ATP
Temperature (field)	49.8		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	352	1	uMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	4.19	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	220	1	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	8	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	5	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 005

SAMPLE DESCRIPTION: P-35S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 11:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	97	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	5	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	97		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	96		86-115%	8260	3/16/10	MMM
Toluene-D8	103		88-110%	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:

  
Data Reporting

Sample #: 006

SAMPLE DESCRIPTION: PUMP HOUSE 130

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 12:06

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.8		SU	SM 4500-H+B	3/12/10	ATP
Temperature (field)	54.3		C	EPA 170.1	3/12/10	ATP
Specific Conductance (field)	324	1	uMHOS/CM	EPA 120.1	3/12/10	ATP
Dissolved Oxygen (Field)	3.72	1.0	mg/l	EPA 360.1	3/12/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	160	1	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	7	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	3	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

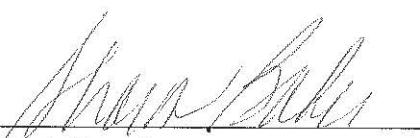
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/12/10

Work Order #: 1003-04469

Approved by:

  
John Ball

Data Reporting

Sample #: 006

SAMPLE DESCRIPTION: PUMP HOUSE 130

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/12/2010 @ 12:06

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	65	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	4	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	97		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	95		86-115%	8260	3/16/10	MMM
Toluene-D8	102		88-110%	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:   
 Data Reporting

Sample #: 007

**SAMPLE DESCRIPTION:** TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 3/12/2010 @ 7:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/16/10	MMM
Bromomethane	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/16/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/16/10	MMM
Chloroethane	<10	10	ug/l	8260	3/16/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/16/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
Chloroform	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/16/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/16/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/16/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/16/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/16/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/16/10	MMM
Bromoform	<1	1	ug/l	8260	3/16/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/16/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/16/10	MMM
Chlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/16/10	MMM
Benzene	<1	1	ug/l	8260	3/16/10	MMM
Toluene	<1	1	ug/l	8260	3/16/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/16/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/16/10	MMM
o-Xylene	<1	1	ug/l	8260	3/16/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/16/10	MMM
Acetone	<10	10	ug/l	8260	3/16/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/16/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/16/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/16/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/16/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/16/10	MMM
Styrene	<1	1	ug/l	8260	3/16/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	3/16/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/12/10  
 Work Order #: 1003-04469

Approved by:



Data Reporting

Sample #: 007

**SAMPLE DESCRIPTION: TRIP BLANK****SAMPLE TYPE: GRAB****SAMPLE DATE/TIME: 3/12/2010 @ 7:30**

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/16/10	MMM
Surrogates			RANGE	8260	3/16/10	MMM
Dibromofluoromethane	98		86-118%	8260	3/16/10	MMM
4-Bromofluorobenzene	99		86-115%	8260	3/16/10	MMM
Toluene-D8	102		88-110%	8260	3/16/10	MMM

**R.I. Analytical Laboratories, Inc.**

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

**CHAIN OF CUSTODY RECORD**

Page \_\_\_\_\_ of \_\_\_\_\_

Container Type Codes:  
P = Plastic      V = Vial  
G = Glass      St = Sterile  
AG = Amber Glass  
O = Other (describe)

Preservative Codes:  
NP = Non preserved      S = Sulfuric  
I = Cooled 4°C      H = HCl  
N = Nitric      SH = NaOH  
M = Methanol      SB = NaHSO<sub>4</sub>

Matrix Codes:  
GW = Groundwater      S = Soil  
WW = Wastewater      SI = Sludge  
DW = Portable Water      A = Air  
O = Other (describe)      B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # - Code	Preservative Code	Matrix Code	Analyses Requested
3/12/10	9:30	MW-1S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
	9:40	P-38S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
	11:00	P-37S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
	11:17	P-36S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
	11:48	P-35S	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
	12:06	Pump House 130	G	3 V	H	GW	8260 including O-Chlorotoluene, field data *
↓	7:30	Trip Blank	G	1 V	H	DI	8260 including O-Chlorotoluene

## Client Information

## Project Information

Company Name:	Ciba Geigy	Project Name / Location:	Ciba Geigy site on Mill Street in Cranston, RI		
Address:	Rt 37 West, PO BOX 71	P.O. Number:			
City / State / Zip:	Tom River, NJ 08754-0071			Report To:	Phone: Fax:
Phone:	(732) 914-2517	Fax:	(732) 914-2909		
Contact:	Ms. Doreen McNicholas			Sampled by:	A.P.
			Reference Proposal:		

Relinquished by:	Date	Time	Received by:	Date	Time
	3/12/10	16:10		3/12/10	16:10

Turn Around Time:
<input type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply
<input type="checkbox"/> Rush (business days)

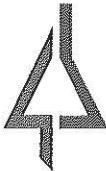
## Project Comments:

\*pH, temperature, S.C., DO, measured in field. Field notes and results attached.

\*\*QC to include  
Matrix Spike, Matrix Spike Duplicate, Duplicate

4.8<sup>c</sup>

RIAL USE ONLY:
<input type="checkbox"/> Pick-Up Only
<input checked="" type="checkbox"/> RIAL Sampled. Attach field hours
<input checked="" type="checkbox"/> Shipped on Ice
RIAL W.O. # <u>1003-044469</u>



## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 3/22/10  
Date Reported: 3/26/10  
P.O. #: TO 002129  
Work Order #: 1003-04970

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by

Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

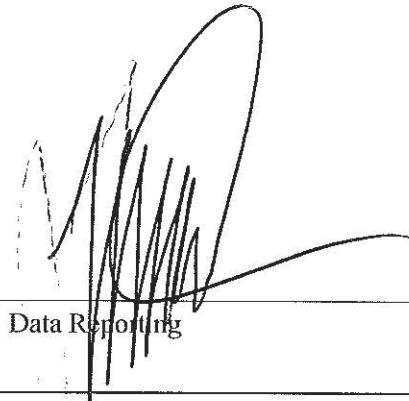
Sample #: 001

SAMPLE DESCRIPTION: MW-002S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 9:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	SM 4500-H+ B	3/22/10	ATP
Temperature (field)	46.4		F	EPA 170.1	3/22/10	ATP
Specific Conductance (field)	138.4	1	uMHOS/CM	EPA 120.1	3/22/10	ATP
Dissolved Oxygen (Field)	4.47	1.0	mg/l	EPA 360.1	3/22/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	110	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	4	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	2	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	1400	50	ug/l	8260	3/25/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	8	1	ug/l	8260	3/24/10	MMM
Toluene	45	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	2	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	1	1	ug/l	8260	3/24/10	MMM
o-Xylene	3	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	4	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM



R.I. Analytical Laboratories, Inc.  
CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Date Received: 3/22/10  
Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 001

SAMPLE DESCRIPTION: MW-002S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/23/2010 @ 9:40

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	2	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	6	1	ug/l	8260	3/24/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	95		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	82		86-115%	8260	3/24/10	MMM
Toluene-D8	99		88-110%	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/22/10  
 Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/22/10	ATP
Temperature (field)	50.2		F	EPA 170.1	3/22/10	ATP
Specific Conductance (field)	109.5	1	uMHOS/CM	EPA 120.1	3/22/10	ATP
Dissolved Oxygen (Field)	7.77	1.0	mg/l	EPA 360.1	3/22/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	44	1	ug/l	8260	3/24/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	<1	1	ug/l	8260	3/24/10	MMM
Toluene	<1	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/24/10	MMM
o-Xylene	1	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	1	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 002

**SAMPLE DESCRIPTION:** MW-004S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 3/22/2010 @ 11:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	26	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	9	1	ug/l	8260	3/24/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	94		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	93		86-115%	8260	3/24/10	MMM
Toluene-D8	101		88-110%	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

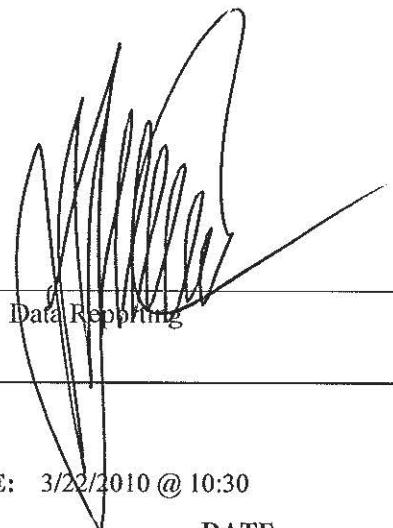
Sample #: 003

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	SM 4500-H+ B	3/22/10	ATP
Temperature (field)	50.4		F	EPA 170.1	3/22/10	ATP
Specific Conductance (field)	114.6	1	µMHOS/CM	EPA 120.1	3/22/10	ATP
Dissolved Oxygen (Field)	2.63	1.0	mg/l	EPA 360.1	3/22/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	<1	1	ug/l	8260	3/24/10	MMM
Toluene	<1	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/24/10	MMM
o-Xylene	<1	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM



## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 10:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	97		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	91		86-115%	8260	3/24/10	MMM
Toluene-D8	102		88-110%	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 11:46

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	3/22/10	ATP
Temperature (field)	51.1		F	EPA 170.1	3/22/10	ATP
Specific Conductance (field)	93.7	1	µMHOS/CM	EPA 120.1	3/22/10	ATP
Dissolved Oxygen (Field)	1.58	1.0	mg/l	EPA 360.1	3/22/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	<1	1	ug/l	8260	3/24/10	MMM
Toluene	<1	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/24/10	MMM
o-Xylene	<1	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 11:46

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	7	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	95		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	3/24/10	MMM
Toluene-D8	102		88-110%	8260	3/24/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 3/22/10  
 Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 005

SAMPLE DESCRIPTION: PUMP HOUSE 130

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 9:16

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.5		SU	SM 4500-H+ B	3/22/10	ATP
Temperature (field)	51.0		F	EPA 170.1	3/22/10	ATP
Specific Conductance (field)	144.2	1	uMHOS/CM	EPA 120.1	3/22/10	ATP
Dissolved Oxygen (Field)	3.86	1.0	mg/l	EPA 360.1	3/22/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	59	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	5	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	26	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	27	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	2400	50	ug/l	8260	3/25/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	53	1	ug/l	8260	3/24/10	MMM
Toluene	27	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	3	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	3	1	ug/l	8260	3/24/10	MMM
o-Xylene	4	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	7	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM

R.I. Analytical Laboratories, Inc.  
**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.  
 Date Received: 3/22/10  
 Work Order #: 1003-04970

Approved by: \_\_\_\_\_

Data Reporting

Sample #: 005

**SAMPLE DESCRIPTION:** PUMP HOUSE 130

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 3/22/2010 @ 9:16

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	66	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	1300	50	ug/l	8260	3/25/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,4-Dichlorobenzene	23	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	95		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	74*		86-115%	8260	3/24/10	MMM
Toluene-D8	100		88-110%	8260	3/24/10	MMM

Method 8260:

\* Surrogate is outside QC Range due to the sample matrix. The diluted re-analysis on this sample yielded all surrogates within the QC Range.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 3/22/10

Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 006

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 8:32

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	3/24/10	MMM
Bromomethane	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	3/24/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	3/24/10	MMM
Chloroethane	<10	10	ug/l	8260	3/24/10	MMM
Methylene Chloride	<5	5	ug/l	8260	3/24/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
Chloroform	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	3/24/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	3/24/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	3/24/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
Trichloroethylene	<1	1	ug/l	8260	3/24/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	3/24/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	3/24/10	MMM
Bromoform	<1	1	ug/l	8260	3/24/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	3/24/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	3/24/10	MMM
Chlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	3/24/10	MMM
Benzene	<1	1	ug/l	8260	3/24/10	MMM
Toluene	<1	1	ug/l	8260	3/24/10	MMM
Ethylbenzene	<1	1	ug/l	8260	3/24/10	MMM
m,p-Xylene	<1	1	ug/l	8260	3/24/10	MMM
o-Xylene	<1	1	ug/l	8260	3/24/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	3/24/10	MMM
Acetone	<10	10	ug/l	8260	3/24/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	3/24/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	3/24/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	3/24/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	3/24/10	MMM
2-Hexanone	<50	50	ug/l	8260	3/24/10	MMM
Styrene	<1	1	ug/l	8260	3/24/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	3/24/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM

R.I. Analytical Laboratories, Inc.  
CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Date Received: 3/22/10  
Work Order #: 1003-04970

Approved by:

Data Reporting

Sample #: 006

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 3/22/2010 @ 8:32

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	3/24/10	MMM
Surrogates			RANGE	8260	3/24/10	MMM
Dibromofluoromethane	99		86-118%	8260	3/24/10	MMM
4-Bromofluorobenzene	92		86-115%	8260	3/24/10	MMM
Toluene-D8	103		88-110%	8260	3/24/10	MMM



## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

**Date Received:** 6/4/10  
**Date Reported:** 6/10/10  
**P.O. #:** TO 002129  
**Work Order #:** 1006-10455

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**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

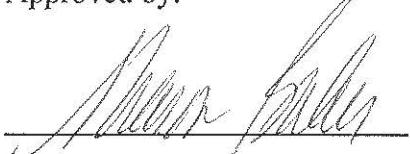
**Reference:** All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact our customer service department.

Approved by:



Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

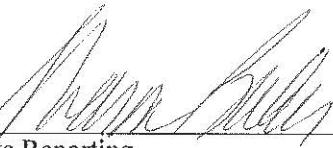
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 10:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	9.3		SU	SM 4500-H+ B	6/3/10	RG
Temperature (field)	12.5		C	EPA 170.1	6/3/10	RG
Specific Conductance (field)	146.2	1	uMHOS/CM	EPA 120.1	6/3/10	RG
Dissolved Oxygen (Field)	1.40	1.0	mg/l	EPA 360.1	6/3/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	2	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	2	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	1500	50	ug/l	8260	6/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	17	1	ug/l	8260	6/8/10	MMM
Toluene	1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	54	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	7	1	ug/l	8260	6/8/10	MMM
o-Xylene	20	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	27	1	ug/l	8260	6/8/10	MMM
Acetone	12	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

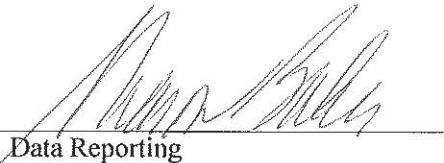
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 10:48

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	1	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	99		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	82		86-115%	8260	6/8/10	MMM
Toluene-D8	99		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

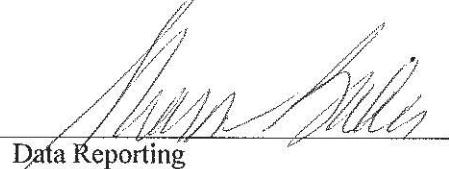
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 002

SAMPLE DESCRIPTION: MW-002S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		SU	SM 4500-H+ B	6/3/10	RG
Temperature (field)	14.3		C	EPA 170.1	6/3/10	RG
Specific Conductance (field)	168.7	1	uMHOS/CM	EPA 120.1	6/3/10	RG
Dissolved Oxygen (Field)	1.66	1.0	mg/l	EPA 360.1	6/3/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	1200	100	ug/l	8260	6/9/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	41	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	500	100	ug/l	8260	6/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	21	1	ug/l	8260	6/8/10	MMM
Toluene	35	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	3	1	ug/l	8260	6/8/10	MMM
o-Xylene	5	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	8	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

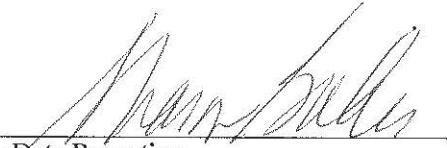
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 002

SAMPLE DESCRIPTION: MW-002S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 12:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	44	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	13	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	101		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	6/8/10	MMM
Toluene-D8	97		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
John Miller  
Data Reporting

Sample # 003

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 13:09

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.3		SU	SM 4500-H+ B	6/3/10	RG
Temperature (field)	15.3		C	EPA 170.1	6/3/10	RG
Specific Conductance (field)	103.8	1	µMHOS/CM	EPA 120.1	6/3/10	RG
Dissolved Oxygen (Field)	4.71	1.0	mg/l	EPA 360.1	6/3/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

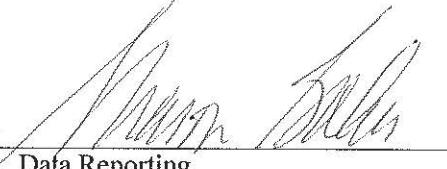
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
John Bell  
Data Reporting

Sample # 003

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/03/2010 @ 13:09

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	11	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	103		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	101		86-115%	8260	6/8/10	MMM
Toluene-D8	101		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

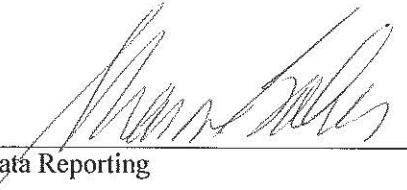
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 004

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/04/2010 @ 10:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+B	6/4/10	RG
Temperature (field)	14.3		C	EPA 170.1	6/4/10	RG
Specific Conductance (field)	92.1	1	uMHOS/CM	EPA 120.1	6/4/10	RG
Dissolved Oxygen (Field)	1.71	1.0	mg/l	EPA 360.1	6/4/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

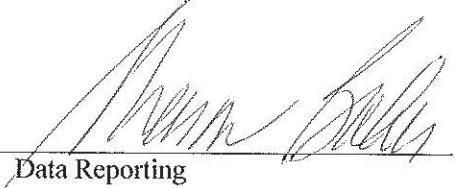
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 004

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/04/2010 @ 10:50

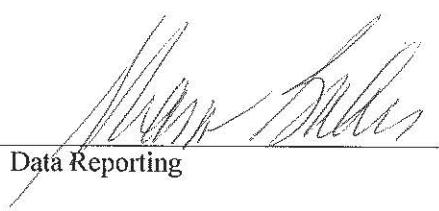
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	99		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	98		86-115%	8260	6/8/10	MMM
Toluene-D8	96		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 6/4/10  
 Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 005

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/04/2010 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.9		SU	SM 4500-H+B	6/4/10	RG
Temperature (field)	15.8		C	EPA 170.1	6/4/10	RG
Specific Conductance (field)	85.8	1	uMHOS/CM	EPA 120.1	6/4/10	RG
Dissolved Oxygen (Field)	1.61	1.0	mg/l	EPA 360.1	6/4/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

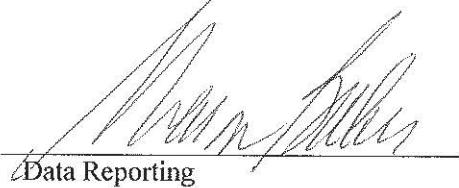
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 005

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/04/2010 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	200	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	103		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	105		86-115%	8260	6/8/10	MMM
Toluene-D8	97		88-110%	8260	6/8/10	MMM

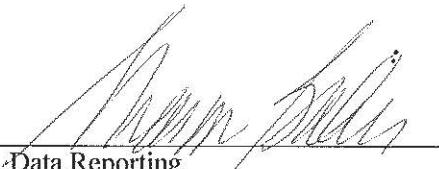
## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 6/4/10  
 Work Order #: 1006-10455

Approved by:

Data Reporting



Sample # 006

SAMPLE DESCRIPTION: P-035S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.2		SU	SM 4500-H+ B	6/2/10	RG
Temperature (field)	17.4		C	EPA 170.1	6/2/10	RG
Specific Conductance (field)	119.3	1	uMHOS/CM	EPA 120.1	6/2/10	RG
Dissolved Oxygen (Field)	2.40	1.0	mg/l	EPA 360.1	6/2/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	1300	50	ug/l	8260	6/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	120	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	4	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	4	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 6/4/10  
 Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 006

SAMPLE DESCRIPTION: P-035S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 11:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	49	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	8	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	99		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	84		86-115%	8260	6/8/10	MMM
Toluene-D8	96		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 007

SAMPLE DESCRIPTION: P-036S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.4		SU	SM 4500-H+B	6/2/10	RG
Temperature (field)	15.2		C	EPA 170.1	6/2/10	RG
Specific Conductance (field)	112.1	1	µMHOS/CM	EPA 120.1	6/2/10	RG
Dissolved Oxygen (Field)	5.40	1.0	mg/l	EPA 360.1	6/2/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	240	10	ug/l	8260	6/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	7	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

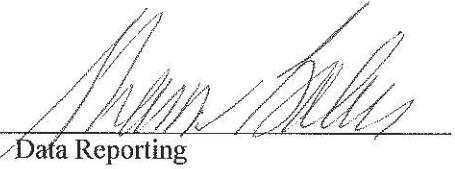
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 007

SAMPLE DESCRIPTION: P-036S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:15

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	8	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	11	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromoform	105	86-118%		8260	6/8/10	MMM
4-Bromofluorobenzene	98	86-115%		8260	6/8/10	MMM
Toluene-D8	100	88-110%		8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

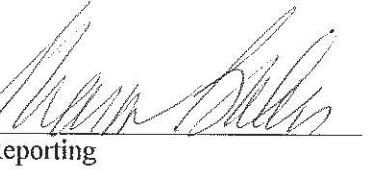
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 008

SAMPLE DESCRIPTION: P-037S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	6/2/10	RG
Temperature (field)	14.6		C	EPA 170.1	6/2/10	RG
Specific Conductance (field)	105.8	1	µMHOS/CM	EPA 120.1	6/2/10	RG
Dissolved Oxygen (Field)	3.75	1.0	mg/l	EPA 360.1	6/2/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	4	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

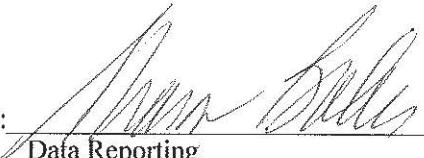
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 008

SAMPLE DESCRIPTION: P-037S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:30

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	16	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	105		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	98		86-115%	8260	6/8/10	MMM
Toluene-D8	98		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

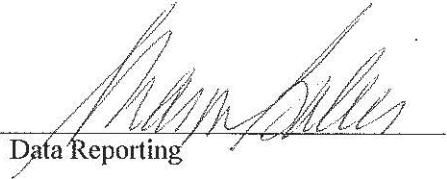
Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

Data Reporting



Sample # 009

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:47

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	6/2/10	RG
Temperature (field)	14.7		C	EPA 170.1	6/2/10	RG
Specific Conductance (field)	101.9	1	uMHOS/CM	EPA 120.1	6/2/10	RG
Dissolved Oxygen (Field)	1.73	1.0	mg/l	EPA 360.1	6/2/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

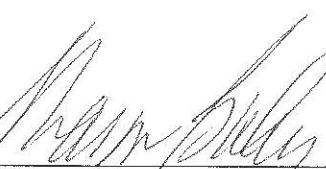
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 009

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010 @ 12:47

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	5	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates		RANGE		8260	6/8/10	MMM
Dibromofluoromethane	103		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	97		86-115%	8260	6/8/10	MMM
Toluene-D8	97		88-110%	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

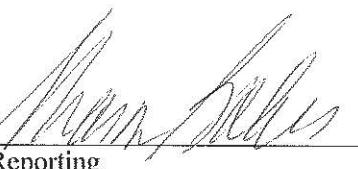
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 010

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	6/8/10	MMM
Bromomethane	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	6/8/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	6/8/10	MMM
Chloroethane	<10	10	ug/l	8260	6/8/10	MMM
Methylene Chloride	<5	5	ug/l	8260	6/8/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
Chloroform	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	6/8/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	6/8/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	6/8/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
Trichloroethylene	<1	1	ug/l	8260	6/8/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	6/8/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	6/8/10	MMM
Bromoform	<1	1	ug/l	8260	6/8/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	6/8/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	6/8/10	MMM
Chlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	6/8/10	MMM
Benzene	<1	1	ug/l	8260	6/8/10	MMM
Toluene	<1	1	ug/l	8260	6/8/10	MMM
Ethylbenzene	<1	1	ug/l	8260	6/8/10	MMM
m,p-Xylene	<1	1	ug/l	8260	6/8/10	MMM
o-Xylene	<1	1	ug/l	8260	6/8/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	6/8/10	MMM
Acetone	<10	10	ug/l	8260	6/8/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	6/8/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	6/8/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	6/8/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	6/8/10	MMM

## R.I. Analytical Laboratories, Inc.

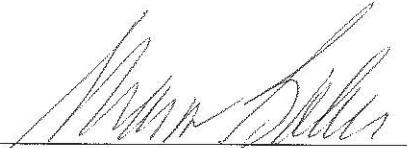
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 6/4/10

Work Order #: 1006-10455

Approved by:

  
Data Reporting

Sample # 010

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 6/02/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
2-Hexanone	<50	50	ug/l	8260	6/8/10	MMM
Styrene	<1	1	ug/l	8260	6/8/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	6/8/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	6/8/10	MMM
Surrogates			RANGE	8260	6/8/10	MMM
Dibromofluoromethane	96		86-118%	8260	6/8/10	MMM
4-Bromofluorobenzene	98		86-115%	8260	6/8/10	MMM
Toluene-D8	93		88-110%	8260	6/8/10	MMM

**R.I. Analytical Laboratories, Inc.**

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

**CHAIN OF CUSTODY RECORD**

Page \_\_\_\_\_ of \_\_\_\_\_

**Container Type Codes:**  
P = Plastic      V = Vial  
G = Glass        St = Sterile  
AG = Amber Glass  
O = Other (describe)

**Preservative Codes:**  
NP = Non preserved   S = Sulfuric  
I = Cooled 4°C       H = HCl  
N = Nitric            SH = NaOH  
M = Methanol        SB = NaHSO<sub>4</sub>

**Matrix Codes:**  
GW = Groundwater   S = Soil  
WW = Wastewater   SI = Sludge  
DW = Potable Water A = Air  
O = Other (describe) B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
6/3/10	1049	MW-001S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1200	MW-002S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1309	MW-004S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
6/4/10	1050	MW-012S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1150	MW-021S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
6/2/10	1145	P-035S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1215	P-036S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1230	P-037S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1244	P-038S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
		Trip Blank	G	1V	H	DI	8260 including O-Chlorotoluene

**Client Information**

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI
Address: Rt 37 West, PO BOX 71	P.O. Number:
City / State / Zip: Tom River, NJ 08754-0071	Report To:
Phone: (732) 914-2517	Sampled by: R.G., R.E.
Contact: Ms. Doreen McNicholas	Reference Proposal:

Relinquished by: Ryan Daff	Date: 6/4/10	Time: 1604	Received by: SMollm	Date: 6/4/10	Time: 1604
----------------------------	--------------	------------	---------------------	--------------	------------

Turn Around Time:
<input checked="" type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply

Project Comments:  *pH, temperature, S.C., measured in field. Field notes and results attached.	MDLs: 1,2 dichlorobenzene <94 ppb chlorobenzene <1700 ppb O-chlorotoluene <1500 ppb toluene <1700 ppb xylenes <76 ppb	3.4°C
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RIAL USE ONLY
<input type="checkbox"/> Pick-Up Only
<input checked="" type="checkbox"/> RIAL Sampled. Attach ...
<input checked="" type="checkbox"/> Shipped on Ice
RIAL W.O. # 1006-10455

## RI Analytical Monitoring Well Data Sheet

Client: CIBA-GEIGY Date: 6/2/10 - 6/4/10

Location: C13A

Field Technician: Ryan G., Randy F.

Well #	Well Diameter (inch)	Total Depth (feet)	Water Depth (feet)	Casing Height (feet)	Volume Need (gallon)	Volume Bail (gallon)	D R Y	pH	Temp	Specific Cond.	D.O.
P39	2	19.4	8.0	3	5.7	5.7		6.4 6.5	14.7 14.3	101.9 102.0	1.73 2.12
P37	2	18.0	8.4	3	4.8	4.8		6.4	14.6 15.0	105.8 105.1	3.75 3.47
P36	2	18.9	8.8	3	5.1	5.1		7.4 7.4	15.2 16.4	112.1 112.8	5.40 5.92
P35	2	18.9	8.6	3	5.15	5.15		7.2 6.9	12.4 15.8	118.3 118.4	2.40 2.48
MW1	4	20.3	9.0	3	28.6	14.6	X	9.3 9.3	12.5 13.6	146.2 140.2	140 1.78
MW2	4	20.0	8.6	3	22.8	22.9		6.7 6.6	14.3 14.0	168.7 171.0	1.66 1.81
MW4	4	22.8	12.0	3	24.6	19.6	X	6.3 6.3	15.3 15.0	103.8 142.6	4.91 5.79
MW12	4	23.3	12.8	3	21.0	21.0		6.6 6.6	14.3 15.5	92.1 94.8	1.71 1.59
MW21	4	15.8	5.2	③	22.2	22.2		6.9 6.8	15.8 15.6	85.8 87.3	1.61 1.24

### 11 Factors For Calculating 3 Times The Volume Of Water:

$$00'' = 0.118932$$

$$2.00'' = 0.489192$$

$$2.50" = 0.767448$$

$$25'' = 0.188496$$

$$2.125" = 0.549780$$

$$4.00'' = 1.959012$$

$$50'' = 0.276012$$

$$2.250'' = 0.619344$$

Volume Needed = Well Factors x Water Depth

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 9/9/10  
Date Reported: 9/14/10  
P.O. #: TO 002129  
Work Order #: 1009-17880

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

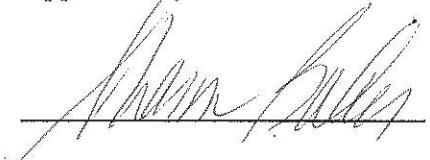
**Reference:** All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:



Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by: 

Data Reporting

Sample #: 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 12:21

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	9.3		SU	SM 4500-H+ B	9/9/10	ATP
Temperature (field)	66.9		F	EPA 170.1	9/9/10	ATP
Specific Conductance (field)	722	1	uMHOS/CM	EPA 120.1	9/9/10	ATP
Dissolved Oxygen (Field)	5.56	1.0	mg/l	EPA 360.1	9/9/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	9/10/10	MMM
Bromomethane	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/10/10	MMM
Chloroethane	<10	10	ug/l	8260	9/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethane	2	1	ug/l	8260	9/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
Chloroform	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/10/10	MMM
Bromoform	<1	1	ug/l	8260	9/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/10/10	MMM
Chlorobenzene	1200	100	ug/l	8260	9/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/10/10	MMM
Benzene	13	1	ug/l	8260	9/10/10	MMM
Toluene	2	1	ug/l	8260	9/10/10	MMM
Ethylbenzene	28	1	ug/l	8260	9/10/10	MMM
m,p-Xylene	14	1	ug/l	8260	9/10/10	MMM
o-Xylene	25	1	ug/l	8260	9/10/10	MMM
Xylenes(Total)	39	1	ug/l	8260	9/10/10	MMM
Acetone	<10	10	ug/l	8260	9/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:

  
Data Reporting

Sample #: 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 12:21

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/10/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
Surrogates		RANGE		8260	9/10/10	MMM
Dibromofluoromethane	98		86-118%	8260	9/10/10	MMM
4-Bromofluorobenzene	114		86-115%	8260	9/10/10	MMM
Toluene-D8	98		88-110%	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:


  
Karen Miller  
 Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: P-037S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 11:47

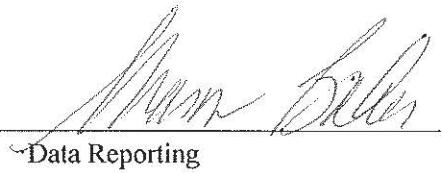
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		su	SM 4500-H+ B	9/9/10	ATP
Temperature (field)	66.9		F	EPA 170.1	9/9/10	ATP
Specific Conductance (field)	121.1	1	uMHOS/CM	EPA 120.1	9/9/10	ATP
Dissolved Oxygen (Field)	5.22	1.0	mg/l	EPA 360.1	9/9/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	9/10/10	MMM
Bromomethane	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/10/10	MMM
Chloroethane	<10	10	ug/l	8260	9/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
Chloroform	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/10/10	MMM
Bromoform	<1	1	ug/l	8260	9/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/10/10	MMM
Chlorobenzene	2	1	ug/l	8260	9/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/10/10	MMM
Benzene	<1	1	ug/l	8260	9/10/10	MMM
Toluene	<1	1	ug/l	8260	9/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/10/10	MMM
o-Xylene	<1	1	ug/l	8260	9/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/10/10	MMM
Acetone	<10	10	ug/l	8260	9/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:



Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: P-037S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 11:47

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/10/10	MMM
o-Chlorotoluene	16	1	ug/l	8260	9/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
Surrogates			RANGE	8260	9/10/10	MMM
Dibromofluoromethane	95		86-118%	8260	9/10/10	MMM
4-Bromofluorobenzene	93		86-115%	8260	9/10/10	MMM
Toluene-D8	96		88-110%	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:   
 Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 13:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		su	SM 4500-H+ B	9/9/10	ATP
Temperature (field)	64.0		F	EPA 170.1	9/9/10	ATP
Specific Conductance (field)	134.6	1	uMHOS/CM	EPA 120.1	9/9/10	ATP
Dissolved Oxygen (Field)	5.58	1.0	mg/l	EPA 360.1	9/9/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	9/10/10	MMM
Bromomethane	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/10/10	MMM
Chloroethane	<10	10	ug/l	8260	9/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
Chloroform	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/10/10	MMM
Bromoform	<1	1	ug/l	8260	9/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/10/10	MMM
Chlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/10/10	MMM
Benzene	<1	1	ug/l	8260	9/10/10	MMM
Toluene	<1	1	ug/l	8260	9/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/10/10	MMM
o-Xylene	<1	1	ug/l	8260	9/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/10/10	MMM
Acetone	<10	10	ug/l	8260	9/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:


  
 John Baker

Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/09/2010 @ 13:03

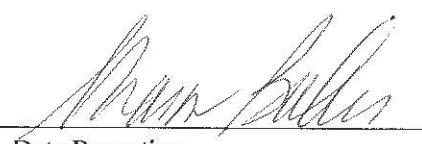
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/10/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
Surrogates			RANGE	8260	9/10/10	MMM
Dibromoform	97		86-118%	8260	9/10/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	9/10/10	MMM
Toluene-D8	99		88-110%	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:


  
Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

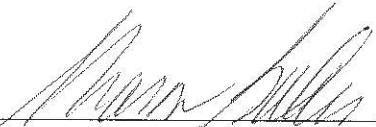
SAMPLE DATE/TIME: 9/09/2010 @ 13:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	9/10/10	MMM
Bromomethane	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/10/10	MMM
Chloroethane	<10	10	ug/l	8260	9/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
Chloroform	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/10/10	MMM
Bromoform	<1	1	ug/l	8260	9/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/10/10	MMM
Chlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/10/10	MMM
Benzene	<1	1	ug/l	8260	9/10/10	MMM
Toluene	<1	1	ug/l	8260	9/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/10/10	MMM
o-Xylene	<1	1	ug/l	8260	9/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/10/10	MMM
Acetone	<10	10	ug/l	8260	9/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/10/10	MMM
Styrene	<1	1	ug/l	8260	9/10/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM

R.I. Analytical Laboratories, Inc.  
**CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.  
 Date Received: 9/9/10  
 Work Order #: 1009-17880

Approved by:

  
 Data Reporting

Sample #: 004

**SAMPLE DESCRIPTION:** TRIP BLANK

**SAMPLE TYPE:** GRAB

**SAMPLE DATE/TIME:** 9/09/2010 @ 13:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/10/10	MMM
Surrogates			RANGE	8260	9/10/10	MMM
Dibromoformmethane	95		86-118%	8260	9/10/10	MMM
4-Bromofluorobenzene	95		86-115%	8260	9/10/10	MMM
Toluene-D8	98		88-110%	8260	9/10/10	MMM

## R.I. Analytical Laboratories, Inc.

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

## **CHAIN OF CUSTODY RECORD**

Page of

Container Type Codes:	Preservative Codes:	Matrix Codes:
P = Plastic	V = Vial	NP = Non preserved
G = Glass	St = Sterile	S = Sulfuric
AG = Amber Glass	I = Cooled 4°C	H = HCl
O = Other (describe)	N = Nitric	SH = NaOH
	M = Methanol	SB = NaHSO <sub>4</sub>
		GW = Groundwater
		WW = Wastewater
		DW = Potable Water
		O = Other (describe)
		S = Soil
		SI = Sludge
		A = Air
		B = Bulk/Solid

## **Client Information**

### **Project Information**

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI		
Address: Rt 37 West, PO BOX 71	P.O. Number:	Project Number:	
City / State / Zip: Toms River, NJ 08754-0071	Report To:	Phone:	Fax:
Phone: (732) 914-2517	Sampled by: A.P., R.F.		
Contact: Ms. Doreen McNicholas	Reference Proposal:		

Relinquished by:	Date	Time	Received by:	Date	Time
<i>Allied</i>	9/9/10	1755	<i>b.D.</i>	9/9/10	1755

#### Turn Around Time:

- Normal
  - 5 business days  
Surcharges may apply

**Project Comments:**

\*pH, temperature, S.C.,  
measured in field. Field notes  
and results attached.

MDLs: 1,2 dichlorobenzene <94 ppb  
 chlorobenzene <1700 ppb  
 O-chlorotoluene <1500 ppb  
 toluene <1700 ppb  
 xylenes <76 ppb

10

3.5

TRIAL USE ONLY

- Pick-Up Only  
 RIAL Sampled. Attach field hours  
 Shipped on Ice

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 9/10/10  
Date Reported: 9/16/10  
P.O. #: TO 002129  
Work Order #: 1009-17957

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

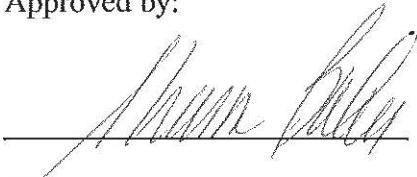
Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:



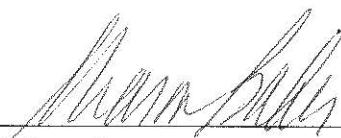
Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/10/10  
 Work Order #: 1009-17957

Approved by: 

Data Reporting

Sample #: 001

**SAMPLE DESCRIPTION:** MW-002S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 9/10/2010 @ 12:27

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.5		SU	SM 4500-H+ B	9/10/10	ATP
Temperature (field)	68.4		C	EPA 170.1	9/10/10	ATP
Specific Conductance (field)	398.5	1	uMHOS/CM	EPA 120.1	9/10/10	ATP
Dissolved Oxygen (Field)	5.105	1.0	mg/l	EPA 360.1	9/10/10	ATP
Volatile Organic Compounds						
Chloromethane	<100	100	ug/l	8260	9/15/10	MMM
Bromomethane	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Chloride	370	10	ug/l	8260	9/15/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	9/15/10	MMM
Chloroethane	<100	100	ug/l	8260	9/15/10	MMM
Methylene Chloride	<50	50	ug/l	8260	9/15/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
Chloroform	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	9/15/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	9/15/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
Trichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Dibromochloromethane	<10	10	ug/l	8260	9/15/10	MMM
Bromoform	<10	10	ug/l	8260	9/15/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	9/15/10	MMM
Chlorobenzene	1500	10	ug/l	8260	9/15/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	9/15/10	MMM
Benzene	74	10	ug/l	8260	9/15/10	MMM
Toluene	59	10	ug/l	8260	9/15/10	MMM
Ethylbenzene	<10	10	ug/l	8260	9/15/10	MMM
m,p-Xylene	<10	10	ug/l	8260	9/15/10	MMM
o-Xylene	<10	10	ug/l	8260	9/15/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	9/15/10	MMM
Acetone	<100	100	ug/l	8260	9/15/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	9/15/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	9/15/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	9/15/10	MMM
2-Hexanone	<500	500	ug/l	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/10/10

Work Order #: 1009-17957

Approved by:

  
Anna Baker

Data Reporting

Sample #: 001

**SAMPLE DESCRIPTION:** MW-002S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 9/10/2010 @ 12:27

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<10	10	ug/l	8260	9/15/10	MMM
o-Chlorotoluene	28	10	ug/l	8260	9/15/10	MMM
1,2-Dichlorobenzene	12	10	ug/l	8260	9/15/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
Surrogates			RANGE	8260	9/15/10	MMM
Dibromofluoromethane	99		86-118%	8260	9/15/10	MMM
4-Bromofluorobenzene	90		86-115%	8260	9/15/10	MMM
Toluene-D8	94		88-110%	8260	9/15/10	MMM

Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/10/10  
 Work Order #: 1009-17957

Approved by:

  
Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 13:12

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	7.1		SU	SM 4500-H+ B	9/10/10	ATP
Temperature (field)	63.4		C	EPA 170.1	9/10/10	ATP
Specific Conductance (field)	254.5	1	µMHOS/CM	EPA 120.1	9/10/10	ATP
Dissolved Oxygen (Field)	7.51	1.0	mg/l	EPA 360.1	9/10/10	ATP
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	9/15/10	MMM
Bromomethane	<10	10	ug/l	8260	9/15/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/15/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/15/10	MMM
Chloroethane	<10	10	ug/l	8260	9/15/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/15/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/15/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/15/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
Chloroform	<1	1	ug/l	8260	9/15/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/15/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/15/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/15/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/15/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/15/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/15/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/15/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/15/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/15/10	MMM
Bromoform	<1	1	ug/l	8260	9/15/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/15/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/15/10	MMM
Chlorobenzene	4	1	ug/l	8260	9/15/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/15/10	MMM
Benzene	<1	1	ug/l	8260	9/15/10	MMM
Toluene	<1	1	ug/l	8260	9/15/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/15/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/15/10	MMM
o-Xylene	<1	1	ug/l	8260	9/15/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/15/10	MMM
Acetone	<10	10	ug/l	8260	9/15/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/15/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/15/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/15/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/15/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/10/10

Work Order #: 1009-17957

Approved by:


  
 Jennifer Heller

Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 13:12

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/15/10	MMM
o-Chlorotoluene	27	1	ug/l	8260	9/15/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
Surrogates			RANGE	8260	9/15/10	MMM
Dibromofluoromethane	97		86-118%	8260	9/15/10	MMM
4-Bromofluorobenzene	92		86-115%	8260	9/15/10	MMM
Toluene-D8	95		88-110%	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/10/10  
 Work Order #: 1009-17957

Approved by: 

Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: P-035S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 11:41

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.2		SU	SM 4500-H+ B	9/10/10	ATP
Temperature (field)	66.25		C	EPA 170.1	9/10/10	ATP
Specific Conductance (field)	137.8	1	µMHOS/CM	EPA 120.1	9/10/10	ATP
Dissolved Oxygen (Field)	4.67	1.0	mg/l	EPA 360.1	9/10/10	ATP
<b>Volatile Organic Compounds</b>						
Chloromethane	<100	100	ug/l	8260	9/15/10	MMM
Bromomethane	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Chloride	<10	10	ug/l	8260	9/15/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	9/15/10	MMM
Chloroethane	<100	100	ug/l	8260	9/15/10	MMM
Methylene Chloride	<50	50	ug/l	8260	9/15/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
Chloroform	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	9/15/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	9/15/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
Trichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Dibromochemicalmethane	<10	10	ug/l	8260	9/15/10	MMM
Bromoform	<10	10	ug/l	8260	9/15/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	9/15/10	MMM
Chlorobenzene	830	10	ug/l	8260	9/15/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	9/15/10	MMM
Benzene	<10	10	ug/l	8260	9/15/10	MMM
Toluene	<10	10	ug/l	8260	9/15/10	MMM
Ethylbenzene	<10	10	ug/l	8260	9/15/10	MMM
m,p-Xylene	<10	10	ug/l	8260	9/15/10	MMM
o-Xylene	<10	10	ug/l	8260	9/15/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	9/15/10	MMM
Acetone	<100	100	ug/l	8260	9/15/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	9/15/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	9/15/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	9/15/10	MMM
2-Hexanone	<500	500	ug/l	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

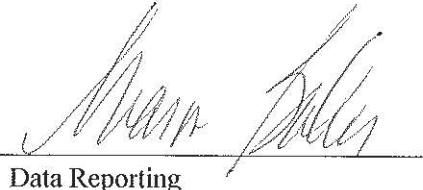
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/10/10

Work Order #: 1009-17957

Approved by:



Data Reporting

Sample #: 003

**SAMPLE DESCRIPTION:** P-035S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 9/10/2010 @ 11:41

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<10	10	ug/l	8260	9/15/10	MMM
o-Chlorotoluene	48	10	ug/l	8260	9/15/10	MMM
1,2-Dichlorobenzene	11	10	ug/l	8260	9/15/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
Surrogates			RANGE	8260	9/15/10	MMM
Dibromofluoromethane	101		86-118%	8260	9/15/10	MMM
4-Bromofluorobenzene	98		86-115%	8260	9/15/10	MMM
Toluene-D8	89		88-110%	8260	9/15/10	MMM

Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/10/10  
 Work Order #: 1009-17957

Approved by:

  
Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: P-036S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 11:52

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.65		SU	SM 4500-H+ B	9/10/10	ATP
Temperature (field)	67.0		C	EPA 170.1	9/10/10	ATP
Specific Conductance (field)	426	1	µMHOS/CM	EPA 120.1	9/10/10	ATP
Dissolved Oxygen (Field)	6.495	1.0	mg/l	EPA 360.1	9/10/10	ATP
Volatile Organic Compounds						
Chloromethane	<100	100	ug/l	8260	9/15/10	MMM
Bromomethane	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Chloride	<10	10	ug/l	8260	9/15/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	9/15/10	MMM
Chloroethane	<100	100	ug/l	8260	9/15/10	MMM
Methylene Chloride	<50	50	ug/l	8260	9/15/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
Chloroform	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	9/15/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	9/15/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	9/15/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	9/15/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
Trichloroethylene	<10	10	ug/l	8260	9/15/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	9/15/10	MMM
Dibromochloromethane	<10	10	ug/l	8260	9/15/10	MMM
Bromoform	<10	10	ug/l	8260	9/15/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	9/15/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	9/15/10	MMM
Chlorobenzene	320	10	ug/l	8260	9/15/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	9/15/10	MMM
Benzene	<10	10	ug/l	8260	9/15/10	MMM
Toluene	<10	10	ug/l	8260	9/15/10	MMM
Ethylbenzene	<10	10	ug/l	8260	9/15/10	MMM
m,p-Xylene	<10	10	ug/l	8260	9/15/10	MMM
o-Xylene	<10	10	ug/l	8260	9/15/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	9/15/10	MMM
Acetone	<100	100	ug/l	8260	9/15/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	9/15/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	9/15/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	9/15/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	9/15/10	MMM
2-Hexanone	<500	500	ug/l	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/10/10

Work Order #: 1009-17957

Approved by:

  
John Miller

Data Reporting

Sample #: 004

SAMPLE DESCRIPTION: P-036S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 11:52

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<10	10	ug/l	8260	9/15/10	MMM
o-Chlorotoluene	14	10	ug/l	8260	9/15/10	MMM
1,2-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	9/15/10	MMM
Surrogates			RANGE	8260	9/15/10	MMM
Dibromofluoromethane	101		86-118%	8260	9/15/10	MMM
4-Bromofluorobenzene	97		86-115%	8260	9/15/10	MMM
Toluene-D8	92		88-110%	8260	9/15/10	MMM

Detection limits increased as a result of sample dilution. Sample dilution required to achieve target compound response within the calibration range of the analysis.

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/10/10  
 Work Order #: 1009-17957

Approved by:

Data Reporting

Sample #: 005

## SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/10/2010 @ 17:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	9/15/10	MMM
Bromomethane	<10	10	ug/l	8260	9/15/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/15/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/15/10	MMM
Chloroethane	<10	10	ug/l	8260	9/15/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/15/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/15/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/15/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
Chloroform	<1	1	ug/l	8260	9/15/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/15/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/15/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/15/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/15/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/15/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/15/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/15/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/15/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/15/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/15/10	MMM
Bromoform	<1	1	ug/l	8260	9/15/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/15/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/15/10	MMM
Chlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/15/10	MMM
Benzene	<1	1	ug/l	8260	9/15/10	MMM
Toluene	<1	1	ug/l	8260	9/15/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/15/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/15/10	MMM
o-Xylene	<1	1	ug/l	8260	9/15/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/15/10	MMM
Acetone	<10	10	ug/l	8260	9/15/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/15/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/15/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/15/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/15/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/15/10	MMM
Styrene	<1	1	ug/l	8260	9/15/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/15/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

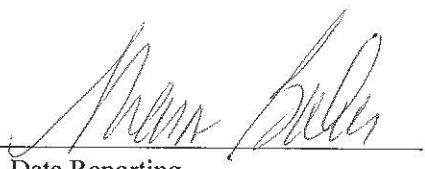
Ciba Specialty Chemicals Corp.

Date Received: 9/10/10

Work Order #: 1009-17957

Approved by:

Data Reporting



Sample #: 005

**SAMPLE DESCRIPTION:** TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 9/10/2010 @ 17:00

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/15/10	MMM
Surrogates			RANGE	8260	9/15/10	MMM
Dibromofluoromethane	98		86-118%	8260	9/15/10	MMM
4-Bromofluorobenzene	91		86-115%	8260	9/15/10	MMM
Toluene-D8	97		88-110%	8260	9/15/10	MMM

## RI Analytical Monitoring Well Data Sheet

Client: Ciba Date: 9/10/10

Location: Ciba, Cranston, RI

Field Technician: A.P., R.F.

## 11 Factors For Calculating 3 Times The Volume Of Water:

$$00'' = 0.118932 \quad 2.00'' = 0.489192 \quad 2.50'' = 0.767448$$

$$25'' = 0.188496 \quad 2.125'' = 0.549780 \quad 4.00'' = 1.959012$$

$$50'' = 0.276012 \quad 2.250'' = 0.619344$$



## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 9/16/10  
Date Reported: 9/22/10  
P.O. #: TO 002129  
Work Order #: 1009-18314

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

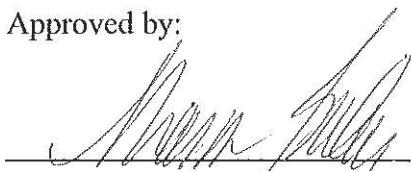
Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:



Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/16/10  
 Work Order #: 1009-18314

Approved by:

Data Reporting

Sample #: 001

## SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010 @ 8:37

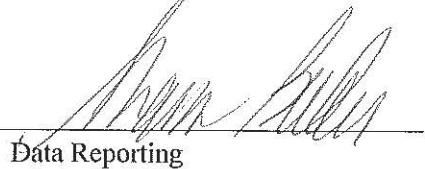
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.7		SU	SM 4500-H+ B	9/16/10	RG
Temperature (field)	62.4		F	EPA 170.1	9/16/10	RG
Specific Conductance (field)	113.0	1	µMHOS/CM	EPA 120.1	9/16/10	RG
Dissolved Oxygen (Field)	5.99	1.0	mg/l	EPA 360.1	9/16/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	9/21/10	MMM
Bromomethane	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/21/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/21/10	MMM
Chloroethane	<10	10	ug/l	8260	9/21/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/21/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
Chloroform	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/21/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/21/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/21/10	MMM
Bromoform	<1	1	ug/l	8260	9/21/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/21/10	MMM
Chlorobenzene	2	1	ug/l	8260	9/21/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/21/10	MMM
Benzene	<1	1	ug/l	8260	9/21/10	MMM
Toluene	<1	1	ug/l	8260	9/21/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/21/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/21/10	MMM
o-Xylene	<1	1	ug/l	8260	9/21/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/21/10	MMM
Acetone	<10	10	ug/l	8260	9/21/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/21/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/21/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/21/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/21/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/16/10  
 Work Order #: 1009-18314

Approved by:

  
Data Reporting

Sample #: 001

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010 @ 8:37

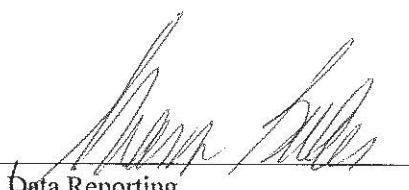
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/21/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
Surrogates			RANGE	8260	9/21/10	MMM
Dibromofluoromethane	108		86-118%	8260	9/21/10	MMM
4-Bromofluorobenzene	93		86-115%	8260	9/21/10	MMM
Toluene-D8	95		88-110%	8260	9/21/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/16/10  
 Work Order #: 1009-18314

Approved by:

  
Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010 @ 9:35

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.2		SU	SM 4500-H+ B	9/16/10	RG
Temperature (field)	62.2		F	EPA 170.1	9/16/10	RG
Specific Conductance (field)	314.0	1	uMHOS/CM	EPA 120.1	9/16/10	RG
Dissolved Oxygen (Field)	3.64	1.0	mg/l	EPA 360.1	9/16/10	RG
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	9/21/10	MMM
Bromomethane	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/21/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/21/10	MMM
Chloroethane	<10	10	ug/l	8260	9/21/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/21/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
Chloroform	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/21/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/21/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/21/10	MMM
Bromoform	<1	1	ug/l	8260	9/21/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/21/10	MMM
Chlorobenzene	2	1	ug/l	8260	9/21/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/21/10	MMM
Benzene	<1	1	ug/l	8260	9/21/10	MMM
Toluene	2	1	ug/l	8260	9/21/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/21/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/21/10	MMM
o-Xylene	3	1	ug/l	8260	9/21/10	MMM
Xylenes(Total)	3	1	ug/l	8260	9/21/10	MMM
Acetone	<10	10	ug/l	8260	9/21/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/21/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/21/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/21/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/21/10	MMM

## R.I. Analytical Laboratories, Inc.

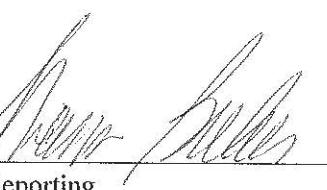
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/16/10

Work Order #: 1009-18314

Approved by:

  
Data Reporting

Sample #: 002

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010 @ 9:35

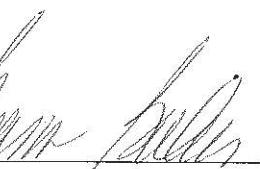
PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	9/21/10	MMM
o-Chlorotoluene	540	10	ug/l	8260	9/22/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
Surrogates			RANGE	8260	9/21/10	MMM
Dibromoform	101		86-118%	8260	9/21/10	MMM
4-Bromofluorobenzene	90		86-115%	8260	9/21/10	MMM
Toluene-D8	94		88-110%	8260	9/21/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
 Date Received: 9/16/10  
 Work Order #: 1009-18314

Approved by:

  
Data Reporting

Sample #: 003

## SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Volatile Organic Compounds						
Chloromethane	<10	10	ug/l	8260	9/21/10	MMM
Bromomethane	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	9/21/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	9/21/10	MMM
Chloroethane	<10	10	ug/l	8260	9/21/10	MMM
Methylene Chloride	<5	5	ug/l	8260	9/21/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
Chloroform	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	9/21/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	9/21/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	9/21/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
Trichloroethylene	<1	1	ug/l	8260	9/21/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	9/21/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	9/21/10	MMM
Bromoform	<1	1	ug/l	8260	9/21/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	9/21/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	9/21/10	MMM
Chlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	9/21/10	MMM
Benzene	<1	1	ug/l	8260	9/21/10	MMM
Toluene	<1	1	ug/l	8260	9/21/10	MMM
Ethylbenzene	<1	1	ug/l	8260	9/21/10	MMM
m,p-Xylene	<1	1	ug/l	8260	9/21/10	MMM
o-Xylene	<1	1	ug/l	8260	9/21/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	9/21/10	MMM
Acetone	<10	10	ug/l	8260	9/21/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	9/21/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	9/21/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	9/21/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	9/21/10	MMM
2-Hexanone	<50	50	ug/l	8260	9/21/10	MMM
Styrene	<1	1	ug/l	8260	9/21/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	9/21/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM

## R.I. Analytical Laboratories, Inc.

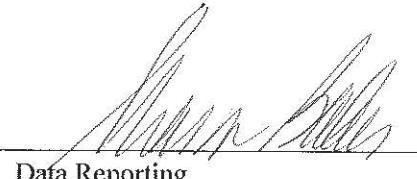
## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 9/16/10

Work Order #: 1009-18314

Approved by:

  
Data Reporting

Sample #: 003

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 9/16/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	9/21/10	MMM
Surrogates			RANGE	8260	9/21/10	MMM
Dibromofluoromethane	103		86-118%	8260	9/21/10	MMM
4-Bromofluorobenzene	91		86-115%	8260	9/21/10	MMM
Toluene-D8	96		88-110%	8260	9/21/10	MMM





## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 12/6/10  
Date Reported: 12/10/10  
P.O. #: TO 002129  
Work Order #: 1012-23956

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	9.2		su	SM 4500-H+ B	12/6/10	RG
Temperature (field)	54.7		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	110.8	1	uMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	2.7	1.0	mg/l	EPA 360.1	12/6/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<100	100	ug/l	8260	12/9/10	MMM
Bromomethane	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<10	10	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	12/9/10	MMM
Chloroethane	<100	100	ug/l	8260	12/9/10	MMM
Methylene Chloride	<50	50	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
Chloroform	<20	20	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
Trichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Dibromo-chloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromoform	<10	10	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	12/9/10	MMM
Chlorobenzene	1600	10	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	12/9/10	MMM
Benzene	29	10	ug/l	8260	12/9/10	MMM
Toluene	<10	10	ug/l	8260	12/9/10	MMM
Ethylbenzene	67	10	ug/l	8260	12/9/10	MMM
m,p-Xylene	15	10	ug/l	8260	12/9/10	MMM
o-Xylene	42	10	ug/l	8260	12/9/10	MMM
Xylenes(Total)	57	10	ug/l	8260	12/9/10	MMM
Acetone	<100	100	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	12/9/10	MMM
2-Hexanone	<500	500	ug/l	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 001

SAMPLE DESCRIPTION: MW-001S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 10:45

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<10	10	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
Surrogates		RANGE		8260	12/9/10	MMM
Dibromofluoromethane	97		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	101		86-115%	8260	12/9/10	MMM
Toluene-D8	100		88-110%	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 002

**SAMPLE DESCRIPTION:** MW-002S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 12:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.4		SU	SM 4500-H+ B	12/6/10	RG
Temperature (field)	49.9		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	108.8	1	uMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	4.4	1.0	mg/l	EPA 360.1	12/6/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<100	100	ug/l	8260	12/9/10	MMM
Bromomethane	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Chloride	800	10	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	12/9/10	MMM
Chloroethane	<100	100	ug/l	8260	12/9/10	MMM
Methylene Chloride	<50	50	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	20	10	ug/l	8260	12/9/10	MMM
Chloroform	<20	20	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
Trichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromoform	<10	10	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	12/9/10	MMM
Chlorobenzene	1400	10	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	12/9/10	MMM
Benzene	130	10	ug/l	8260	12/9/10	MMM
Toluene	48	10	ug/l	8260	12/9/10	MMM
Ethylbenzene	<10	10	ug/l	8260	12/9/10	MMM
m,p-Xylene	<10	10	ug/l	8260	12/9/10	MMM
o-Xylene	<10	10	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	12/9/10	MMM
Acetone	<100	100	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	12/9/10	MMM
2-Hexanone	<500	500	ug/l	8260	12/9/10	MMM

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 002

**SAMPLE DESCRIPTION:** MW-002S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 12:20

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
Styrene	<10	10	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	63	10	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	15	10	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
Surrogates			RANGE	8260	12/9/10	MMM
Dibromofluoromethane	102		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	102		86-115%	8260	12/9/10	MMM
Toluene-D8	100		88-110%	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 003

SAMPLE DESCRIPTION: P-035S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 12:38

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	5.5		SU	SM 4500-H+ B	12/6/10	RG
Temperature (field)	51.3		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	111.7	1	µMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	4.0	1.0	mg/l	EPA 360.1	12/6/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<100	100	ug/l	8260	12/9/10	MMM
Bromomethane	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<10	10	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	12/9/10	MMM
Chloroethane	<100	100	ug/l	8260	12/9/10	MMM
Methylene Chloride	<50	50	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
Chloroform	<20	20	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
Trichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromoform	<10	10	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	12/9/10	MMM
Chlorobenzene	1600	10	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	12/9/10	MMM
Benzene	550	10	ug/l	8260	12/9/10	MMM
Toluene	<10	10	ug/l	8260	12/9/10	MMM
Ethylbenzene	<10	10	ug/l	8260	12/9/10	MMM
m,p-Xylene	<10	10	ug/l	8260	12/9/10	MMM
o-Xylene	<10	10	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	12/9/10	MMM
Acetone	<100	100	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	12/9/10	MMM
2-Hexanone	<500	500	ug/l	8260	12/9/10	MMM

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 003

**SAMPLE DESCRIPTION:** P-035S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 12:38

<b>PARAMETER</b>	<b>SAMPLE RESULTS</b>	<b>DET. LIMIT</b>	<b>UNITS</b>	<b>METHOD</b>	<b>DATE ANALYZED</b>	<b>ANALYST</b>
Styrene	<10	10	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	61	10	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	11	10	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
Surrogates			RANGE	8260	12/9/10	MMM
Dibromofluoromethane	97		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	101		86-115%	8260	12/9/10	MMM
Toluene-D8	101		88-110%	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 004

**SAMPLE DESCRIPTION:** P-036S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.6		SU	SM 4500-H+ B	12/6/10	RG
Temperature (field)	47.5		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	104.7	1	uMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	3.3	1.0	mg/l	EPA 360.1	12/6/10	RG
Volatile Organic Compounds						
Chloromethane	<100	100	ug/l	8260	12/9/10	MMM
Bromomethane	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<10	10	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<100	100	ug/l	8260	12/9/10	MMM
Chloroethane	<100	100	ug/l	8260	12/9/10	MMM
Methylene Chloride	<50	50	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
Chloroform	<20	20	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<10	10	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<10	10	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<10	10	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
Trichloroethylene	<10	10	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<10	10	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromoform	<10	10	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<10	10	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<10	10	ug/l	8260	12/9/10	MMM
Chlorobenzene	200	10	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<20	20	ug/l	8260	12/9/10	MMM
Benzene	<10	10	ug/l	8260	12/9/10	MMM
Toluene	<10	10	ug/l	8260	12/9/10	MMM
Ethylbenzene	<10	10	ug/l	8260	12/9/10	MMM
m,p-Xylene	<10	10	ug/l	8260	12/9/10	MMM
o-Xylene	<10	10	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<10	10	ug/l	8260	12/9/10	MMM
Acetone	<100	100	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<50	50	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<100	100	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<500	500	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<500	500	ug/l	8260	12/9/10	MMM
2-Hexanone	<500	500	ug/l	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 004

**SAMPLE DESCRIPTION:** P-036S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 11:50

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<10	10	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	<10	10	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<10	10	ug/l	8260	12/9/10	MMM
Surrogates		RANGE		8260	12/9/10	MMM
Dibromofluoromethane	100		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	98		86-115%	8260	12/9/10	MMM
Toluene-D8	101		88-110%	8260	12/9/10	MMM

## R.J. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 005

**SAMPLE DESCRIPTION:** P-037S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010 @ 11:08

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.3		SU	SM 4500-H+ B	12/6/10	RG
Temperature (field)	51.1		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	88.9	1	uMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	4.3	1.0	mg/l	EPA 360.1	12/6/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromomethane	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/9/10	MMM
Chloroethane	<10	10	ug/l	8260	12/9/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
Chloroform	<2	2	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/9/10	MMM
Bromoform	<1	1	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/9/10	MMM
Chlorobenzene	3	1	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/9/10	MMM
Benzene	<1	1	ug/l	8260	12/9/10	MMM
Toluene	<1	1	ug/l	8260	12/9/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/9/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/9/10	MMM
o-Xylene	<1	1	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/9/10	MMM
Acetone	<10	10	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/9/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 005

SAMPLE DESCRIPTION: P-037S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 11:08

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	19	1	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	1	1	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
Surrogates			RANGE	8260	12/9/10	MMM
Dibromofluoromethane	103		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	100		86-115%	8260	12/9/10	MMM
Toluene-D8	102		88-110%	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 006

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 10:28

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.3		SU	SM 4500-H+ B	12/6/10	RG
Temperature (field)	52.6		C	EPA 170.1	12/6/10	RG
Specific Conductance (field)	34.2	1	uMHOS/CM	EPA 120.1	12/6/10	RG
Dissolved Oxygen (Field)	3.7	1.0	mg/l	EPA 360.1	12/6/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromomethane	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/9/10	MMM
Chloroethane	<10	10	ug/l	8260	12/9/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
Chloroform	<2	2	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/9/10	MMM
Bromoform	<1	1	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/9/10	MMM
Chlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/9/10	MMM
Benzene	<1	1	ug/l	8260	12/9/10	MMM
Toluene	<1	1	ug/l	8260	12/9/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/9/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/9/10	MMM
o-Xylene	<1	1	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/9/10	MMM
Acetone	<10	10	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/9/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 006

SAMPLE DESCRIPTION: P-038S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010 @ 10:28

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
Surrogates		RANGE		8260	12/9/10	MMM
Dibromofluoromethane	105		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	101		86-115%	8260	12/9/10	MMM
Toluene-D8	101		88-110%	8260	12/9/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 007

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/06/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/9/10	MMM
Bromomethane	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/9/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/9/10	MMM
Chloroethane	<10	10	ug/l	8260	12/9/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/9/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
Chloroform	<2	2	ug/l	8260	12/9/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/9/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/9/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/9/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/9/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/9/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/9/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/9/10	MMM
Bromoform	<1	1	ug/l	8260	12/9/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/9/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/9/10	MMM
Chlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/9/10	MMM
Benzene	<1	1	ug/l	8260	12/9/10	MMM
Toluene	<1	1	ug/l	8260	12/9/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/9/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/9/10	MMM
o-Xylene	<1	1	ug/l	8260	12/9/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/9/10	MMM
Acetone	<10	10	ug/l	8260	12/9/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/9/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/9/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/9/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/9/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/9/10	MMM
Styrene	<1	1	ug/l	8260	12/9/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	12/9/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM

**R.I. Analytical Laboratories, Inc.****CERTIFICATE OF ANALYSIS**

Ciba Specialty Chemicals Corp.

Date Received: 12/6/10

Work Order #: 1012-23956

Sample #: 007

**SAMPLE DESCRIPTION:** TRIP BLANK**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/06/2010

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/9/10	MMM
Surrogates			RANGE	8260	12/9/10	MMM
Dibromofluoromethane	103		86-118%	8260	12/9/10	MMM
4-Bromofluorobenzene	103		86-115%	8260	12/9/10	MMM
Toluene-D8	101		88-110%	8260	12/9/10	MMM

**R.I. Analytical Laboratories, Inc.**

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

**CHAIN OF CUSTODY RECORD**Page 1 of 1

**Container Type Codes:**  
P = Plastic      V = Vial  
G = Glass        St = Sterile  
AG = Amber Glass  
O = Other (describe)

**Preservative Codes:**  
NP = Non preserved   S = Sulfuric  
I = Cooled 4°C       H = HCl  
N = Nitric            SH = NaOH  
M = Methanol        SB = NaHSO<sub>4</sub>

**Matrix Codes:**  
GW = Groundwater   S = Soil  
WW = Wastewater    SI = Sludge  
DW = Potable Water A = Air  
O = Other (describe) B = Bulk/Solid

Date Collected	Time Collected	Sample ID	G = Grab C = Comp.	Containers # + Code	Preservative Code	Matrix Code	Analyses Requested
12/6/00	1045	MW-001S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1220	MW-002S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
		MW-004S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
		MW-012S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
		MW-021S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
12/6/00	1238	P-035S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1150	P-036S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1108	P-037S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
↓	1023	P-038S	G	3V	H	GW	8260 including O-Chlorotoluene, field data *
		Trip Blank	G	1V	H	DI	8260 including O-Chlorotoluene

## Client Information

## Project Information

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI
Address: Rt 37 West, PO BOX 71	P.O. Number: Project Number:
City / State / Zip: Tom River, NJ 08754-0071	Report To: Phone: Fax:
Phone: (732) 914-2517	Sampled by: A.P., R.G.
Contact: Ms. Doreen McNicholas	Reference Proposal:

Relinquished by:	Date	Time	Received by:	Date	Time
Ryan Giffen	12/6/00	1330	D.W.	12/6/00	1330

Turn Around Time:
<input checked="" type="checkbox"/> Normal
<input type="checkbox"/> 5 business days Surcharges may apply

## Project Comments:

\*pH, temperature, S.C., measured in field. Field notes and results attached.

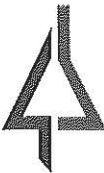
MDLs: 1,2 dichlorobenzene <94 ppb  
chlorobenzene <1700 ppb  
O-chlorotoluene <1500 ppb  
toluene <1700 ppb  
xylenes <76 ppb

B.D.C

## RIAL USE ONLY:

- Pick-Up Only  
 RIAL Sampled. Attach field hours  
 Shipped on Ice  
RIAL W.O. #

102-23056



## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.  
Attn: Ms. Doreen McNichols  
P.O Box 71  
Bldg. 216  
Toms River, NJ 08754

Date Received: 12/7/10  
Date Reported: 12/14/10  
P.O. #: TO 002129  
Work Order #: 1012-24120

---

**DESCRIPTION:** CIBA GEIGY SITE ON MILL STREET IN CRANSTON, RI

---

Subject sample(s) has/have been analyzed by our Warwick, R.I. laboratory with the attached results.

Reference: All parameters were analyzed by U.S. EPA approved methodologies.  
The specific methodologies are listed in the methods column of the Certificate Of Analysis.

Data qualifiers (if present) are explained in full at the end of a given sample's analytical results.

Certification #: RI-033, MA-RI015, CT-PH-0508, ME-RI015  
NH-253700 A & B, USDA S-41844

If you have any questions regarding this work, or if we may be of further assistance, please contact us.

Approved by:

Data Reporting

enc: Chain of Custody

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 001

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 9:18

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.3		SU	SM 4500-H+ B	12/7/10	RG
Temperature (field)	52.3		F	EPA 170.1	12/7/10	RG
Specific Conductance (field)	90.2	1	uMHOES/CM	EPA 120.1	12/7/10	RG
Dissolved Oxygen (Field)	6.50	1.0	mg/l	EPA 360.1	12/7/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/10/10	MMM
Bromomethane	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/10/10	MMM
Chloroethane	<10	10	ug/l	8260	12/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
Chloroform	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/10/10	MMM
Bromoform	<1	1	ug/l	8260	12/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/10/10	MMM
Chlorobenzene	7	1	ug/l	8260	12/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/10/10	MMM
Benzene	<1	1	ug/l	8260	12/10/10	MMM
Toluene	<1	1	ug/l	8260	12/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/10/10	MMM
o-Xylene	<1	1	ug/l	8260	12/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/10/10	MMM
Acetone	<10	10	ug/l	8260	12/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 001

SAMPLE DESCRIPTION: MW-004S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 9:18

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	12/10/10	MMM
o-Chlorotoluene	6	1	ug/l	8260	12/10/10	MMM
1,2-Dichlorobenzene	1	1	ug/l	8260	12/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
Surrogates			RANGE	8260	12/10/10	MMM
Dibromofluoromethane	97		86-118%	8260	12/10/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	12/10/10	MMM
Toluene-D8	100		88-110%	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 002

**SAMPLE DESCRIPTION:** MW-012S**SAMPLE TYPE:** GRAB**SAMPLE DATE/TIME:** 12/07/2010 @ 10:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.2		SU	SM 4500-H+ B	12/7/10	RG
Temperature (field)	53.0		F	EPA 170.1	12/7/10	RG
Specific Conductance (field)	359	1	uMHOS/CM	EPA 120.1	12/7/10	RG
Dissolved Oxygen (Field)	4.60	1.0	mg/l	EPA 360.1	12/7/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/10/10	MMM
Bromomethane	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/10/10	MMM
Chloroethane	<10	10	ug/l	8260	12/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
Chloroform	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/10/10	MMM
Bromoform	<1	1	ug/l	8260	12/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/10/10	MMM
Chlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/10/10	MMM
Benzene	<1	1	ug/l	8260	12/10/10	MMM
Toluene	<1	1	ug/l	8260	12/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/10/10	MMM
o-Xylene	<1	1	ug/l	8260	12/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/10/10	MMM
Acetone	<10	10	ug/l	8260	12/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 002

SAMPLE DESCRIPTION: MW-012S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 10:03

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	12/10/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
Surrogates			RANGE	8260	12/10/10	MMM
Dibromoform	99		86-118%	8260	12/10/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	12/10/10	MMM
Toluene-D8	98		88-110%	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 003

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 11:07

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
pH (field)	6.1		SU	SM 4500-H+ B	12/7/10	RG
Temperature (field)	53.0		F	EPA 170.1	12/7/10	RG
Specific Conductance (field)	55.9	1	uMHOS/CM	EPA 120.1	12/7/10	RG
Dissolved Oxygen (Field)	4.67	1.0	mg/l	EPA 360.1	12/7/10	RG
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/10/10	MMM
Bromomethane	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/10/10	MMM
Chloroethane	<10	10	ug/l	8260	12/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
Chloroform	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/10/10	MMM
Bromoform	<1	1	ug/l	8260	12/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/10/10	MMM
Chlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ug/l	8260	12/10/10	MMM
Benzene	<1	1	ug/l	8260	12/10/10	MMM
Toluene	<1	1	ug/l	8260	12/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/10/10	MMM
o-Xylene	<1	1	ug/l	8260	12/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/10/10	MMM
Acetone	<10	10	ug/l	8260	12/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 003

SAMPLE DESCRIPTION: MW-021S

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 11:07

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
Styrene	<1	1	ug/l	8260	12/10/10	MMM
o-Chlorotoluene	13	1	ug/l	8260	12/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
Surrogates		RANGE		8260	12/10/10	MMM
Dibromofluoromethane	98		86-118%	8260	12/10/10	MMM
4-Bromofluorobenzene	95		86-115%	8260	12/10/10	MMM
Toluene-D8	98		88-110%	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 004

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 8:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
<b>Volatile Organic Compounds</b>						
Chloromethane	<10	10	ug/l	8260	12/10/10	MMM
Bromomethane	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Chloride	<1	1	ug/l	8260	12/10/10	MMM
Dichlorodifluoromethane	<10	10	ug/l	8260	12/10/10	MMM
Chloroethane	<10	10	ug/l	8260	12/10/10	MMM
Methylene Chloride	<5	5	ug/l	8260	12/10/10	MMM
Trichlorofluoromethane	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
trans-1,2-Dichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
Chloroform	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloroethane	<1	1	ug/l	8260	12/10/10	MMM
1,1,1-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Carbon Tetrachloride	<1	1	ug/l	8260	12/10/10	MMM
Bromodichloromethane	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichloropropane	<1	1	ug/l	8260	12/10/10	MMM
cis-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
Trichloroethylene	<1	1	ug/l	8260	12/10/10	MMM
trans-1,3-Dichloropropylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2-Trichloroethane	<1	1	ug/l	8260	12/10/10	MMM
Dibromochloromethane	<1	1	ug/l	8260	12/10/10	MMM
Bromoform	<1	1	ug/l	8260	12/10/10	MMM
Tetrachloroethylene	<1	1	ug/l	8260	12/10/10	MMM
1,1,2,2-Tetrachloroethane	<1	1	ug/l	8260	12/10/10	MMM
Chlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
2-Chloroethyl vinyl ether	<2	2	ng/l	8260	12/10/10	MMM
Benzene	<1	1	ug/l	8260	12/10/10	MMM
Toluene	<1	1	ug/l	8260	12/10/10	MMM
Ethylbenzene	<1	1	ug/l	8260	12/10/10	MMM
m,p-Xylene	<1	1	ug/l	8260	12/10/10	MMM
o-Xylene	<1	1	ug/l	8260	12/10/10	MMM
Xylenes(Total)	<1	1	ug/l	8260	12/10/10	MMM
Acetone	<10	10	ug/l	8260	12/10/10	MMM
Carbon Disulfide	<5	5	ug/l	8260	12/10/10	MMM
2-Butanone(MEK)	<10	10	ug/l	8260	12/10/10	MMM
Vinyl Acetate	<50	50	ug/l	8260	12/10/10	MMM
4-Methyl-2-pentanone(MIBK)	<50	50	ug/l	8260	12/10/10	MMM
2-Hexanone	<50	50	ug/l	8260	12/10/10	MMM
Styrene	<1	1	ug/l	8260	12/10/10	MMM
o-Chlorotoluene	<1	1	ug/l	8260	12/10/10	MMM
1,2-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
1,3-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

## CERTIFICATE OF ANALYSIS

Ciba Specialty Chemicals Corp.

Date Received: 12/7/10

Work Order #: 1012-24120

Sample #: 004

SAMPLE DESCRIPTION: TRIP BLANK

SAMPLE TYPE: GRAB

SAMPLE DATE/TIME: 12/07/2010 @ 8:20

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALYZED	ANALYST
1,4-Dichlorobenzene	<1	1	ug/l	8260	12/10/10	MMM
Surrogates			RANGE	8260	12/10/10	MMM
Dibromofluoromethane	95		86-118%	8260	12/10/10	MMM
4-Bromofluorobenzene	94		86-115%	8260	12/10/10	MMM
Toluene-D8	98		88-110%	8260	12/10/10	MMM

## R.I. Analytical Laboratories, Inc.

41 Illinois Avenue  
Warwick, RI 02888  
Phone: (800) 937-2580  
Fax: (401) 738-1970

950 Boylston Street, Unit 102  
Newton Highlands, MA 02461  
Phone: (888) 228-3334  
Fax: (617) 965-5624

# **CHAIN OF CUSTODY RECORD**

Page of

Container Type Codes:	Preservative Codes:	Matrix Codes:
P = Plastic	V = Vial	NP = Non preserved
G = Glass	St = Sterile	I = Cooled 4°C
AG = Amber Glass	N = Nitric	H = HCl
O = Other (describe)	M = Methanol	SH = NaOH
		SB = NaHSO <sub>4</sub>

## **Client Information**

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## Project Information

Company Name: Ciba Geigy	Project Name / Location: Ciba Geigy site on Mill Street in Cranston, RI		
Address: Rt 37 West, PO BOX 71	P.O. Number:	Project Number:	
City / State / Zip: Tom River, NJ 08754-0071	Report To:	Phone:	Fax:
Phone: (732) 914-2517	Fax: (732) 914-2909	Sampled by: RG, A.P.	
Contact: Ms. Doreen McNicholas	Reference Proposal:		

Relinquished by: 1

Date

### Time

Received by

100 Data

Lesson Time

Turn Around Time

## Normal

5 business days  
Surcharges may apply

### **Project Comments:**

\*pH, temperature, S.C.,  
measured in field. Field notes  
and results attached

\* Well lid broken and in pieces, no longer fully covering the well opening

MDLs: 1,2 dichlorobenzene <94 ppb  
 chlorobenzene <1700 ppb  
 O-chlorotoluene <1500 ppb  
 toluene <1700 ppb  
 xylenes <76 ppb

4.0°

TRIAL USE ONLY

- Pick-Up Only
- RIAL Sampled. Attach field hours
- Shipped on Ice